

Mitigation Monitoring Plan (MMP)
for Project Management Oversight
of Environmental Compliance

Honolulu High-Capacity Transit Corridor Project

November 5, 2010

Prepared for:
City and County of Honolulu

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Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
C/DB	Contractor- or Design-Builder
CRE	Contract Resident Engineer
City	City and County of Honolulu
CMS	Contract Management System
DB	Design-Build
DBB	Design-Bid-Build
DBOM	Design-Build-Operate-Maintain
DTS	City and County of Honolulu Department of Transportation Services
ECM	Environmental Compliance Manager
ECP	Environmental Compliance Plan
EIS	Environmental Impact Statement
EPM	Environmental Planning Manager
FTA	Federal Transit Administration
GEC	General Engineering Consultant
HHCTCP	Honolulu High-Capacity Transit Corridor Project
LPA	Locally Preferred Alternative
MMP	Mitigation Monitoring Plan
NEPA	National Environmental Policy Act
OIBC	O'ahu Island Burial Council
PA	Section 106 Programmatic Agreement
PACG	Programmatic Agreement Coordination Group
PEM	Planning and Environment Manager
PMOC	Project Management Oversight Committee
PM Team	Project Management Team
Project	20-mile segment of Honolulu High-Capacity Transit Corridor Project
ROD	Record of Decision
RTD	City and County of Honolulu Department of Transportation Services Rapid Transit Division
SHPD	State Historic Preservation Division
SOEP	System Operation and Emergency Procedures
SSCP	Safety and Security Certification Plan
SSM	Safety and Security Manager

1.0 Introduction

This Mitigation Monitoring Plan (MMP) describes the environmental management program for the City and County of Honolulu (City) for the 20-mile portion of the Honolulu High-Capacity Transit Corridor Project (HHCTCP), which is the “Project” described in the Final EIS (June 2010). The Project includes construction and operation of an elevated fixed guideway rail system from East Kapolei through Downtown Honolulu to Ala Moana Center.

The MMP identifies the monitoring and coordination necessary to limit potential impacts to the environment, and to protected resources and communities within and adjacent to the project area.

The objectives of the MMP are as follows:

- Confirm that environmental commitments and mitigation measures stipulated within the June 2010 Final Environmental Impact Statement (Final EIS), the [>>date<<] Record of Decision (ROD), and Section 106 of the National Historic Preservation Act (NHPA) Programmatic Agreement (PA) executed [>>date<<] are incorporated into the Project’s plans and specifications and identified in applicable contract documents
- Identify methods to monitor the environmental requirements within the project area that require compliance with Federal, State, and Local regulatory permit conditions
- Define responsibilities and actions to manage compliance with environmental requirements during design and construction
- Effectively respond to problem situations concerning design and construction or to address agency/public concerns
- Establish procedures for communication, documentation, and review of environmental compliance activities for each design and construction contract
- Describe the process to monitor mitigation commitments for protected resources within the Project
- Check and ensure that contractor submittals include means and methods to avoid or minimize impacts to the environment in accordance with construction contract documents

Each contractor will be required to prepare an Environmental Compliance Plan that addresses relevant environmental regulations and permit conditions, and other environmental compliance requirements specified in contract specifications and reports, including the Final EIS, ROD, and PA. For the purposes of discussion of environmental commitments in this MMP, the PA stipulations are incorporated into the ROD and specifically discussed in Section 6.0 of this MMP. The City will represent the interests of the Federal Transit Administration (FTA) to ensure environmental compliance by its contractors.

The Final EIS describes mitigation measures that will be implemented as part of the Project. The ROD includes the identified mitigation commitments to be

implemented during Final Design and construction. The ROD summarizes the potential effects of the Project, the commitment to mitigate those effects, the monitoring action, and the condition of approval required to check that the measures are implemented. The ROD also identifies the parties responsible for implementation and key milestones for implementation.

The FTA requires that the City establish a mitigation monitoring program to verify compliance of mitigation and design commitments by the teams working on Final Design and construction and to provide a means for the City and FTA to track the progress in accomplishing the mitigation commitments. FTA will require, as a condition of any grant or grant agreement with the City, that all committed mitigation measures in the Final EIS be implemented unless FTA approves of a change in writing and after an appropriate National Environmental Policy Act (NEPA) review. FTA will monitor implementation of mitigation measures through monthly updates and quarterly reports during design and construction or other appropriate means.

The MMP contains three appendices: Appendix A—Project Mitigation Monitoring Plan (MMP) is the framework for the mitigation monitoring program by type of resource and topic. Appendix B (Section 106 PA MMP) describes the mitigation monitoring plan for implementation of the stipulations contained in the PA. Appendix C describes the mitigation monitoring process for oversight of environmental compliance for Design-Build Contracts. As mitigation commitments are implemented or completed, the status will be updated in the Contract Management System (CMS) database (see Section 4.1) and reported to FTA.

Management of the mitigation monitoring process requires close coordination between the City and County of Honolulu Department of Transportation Services (DTS) Rapid Transit Division (RTD), the General Engineering Consultant (GEC), and State and Federal regulatory/resource agencies. One of the responsibilities of the GEC is to monitor the implementation of environmental mitigation during design and construction. The specific GEC and RTD processes and documentation format for the Project will be established during the design phase for the different contracting methods. The management process will define the procedures that will be followed to check that mitigation measures identified in the environmental documents are actually incorporated into the design and/or construction plans and specifications.

The process of environmental compliance began with the Project Management Team (PM Team) identifying and integrating environmental requirements from the Final EIS into contract specifications and checklists during design. The environmental compliance process also includes activities to verify that permitting and construction planning and staging have incorporated environmental controls and mitigation measures into final design.

Management of the mitigation monitoring process will continue through completion of construction to verify that mitigation measures are incorporated into the construction documents and implemented.

This MMP may be updated as design and construction progresses and if new environmental issues are identified. Periodic reviews of the plan and procedures will be performed and the MMP will be updated based on its effectiveness.

Because the Project will involve design-bid-build contracts, design-build contracts, and design-build-operate-maintain contracts, the MMP is intended to be flexible and tailored to match variable design and construction activities. The MMP provides a general framework for methods that will be employed to avoid or reduce environmental impacts from construction activities. Specific environmental requirements and controls will be tailored to the various design and construction contracts and will be included in contractor specifications. Other appendices will be added to the MMP to describe mitigation monitoring processes for various contracting methods.

Management of the MMP will be achieved by using the following management approaches:

- Maintain on-going interface and communication between the PM Team, FTA, and other agencies
- Use the Project's quality control procedures for design and construction to verify compliance
- Review project design for environmental elements and mitigation measures that are project-wide and/or location specific
- Procure and involve environmental consultants with technical expertise and problem-solving capability as required
- Perform site environmental compliance inspections and/or verify construction procedures comply with mitigation measures
- Contribute to RTD's development of CMS and maintain the database that documents project commitments
- Provide regular reporting from the CMS database and other sources on environmental compliance status, issues, and recommended actions for resolution

2.0 Project Information

The Project is being planned and designed under FTA's New Starts Program. The Locally Preferred Alternative (LPA), as identified by the City Council at the conclusion of the Alternatives Analysis process, is a step required under FTA's discretionary New Starts Program. It represents the City's long-range plan for the rail system, which includes the Project (as defined below) and four potential extensions.

The NEPA Preferred Alternative, referred to in the Final EIS as the Project, is a 20-mile portion of the LPA for which FTA may provide Federal funding. FTA and

the City identified this alternative as preferred for meeting the Purpose and Need over other alternatives studied, including the No Build Alternative. The Project includes the construction and operation of an elevated fixed guideway rail system. It is a portion of the LPA that begins at the University of Hawai'i at West O'ahu (near the future Kroc Center) and proceeds via Farrington Highway and Kamehameha Highway (adjacent to Pearl Harbor) to Aolele Street serving the Airport, to Dillingham Boulevard, to Nimitz Highway, to Halekauwila Street, and ending at Ala Moana Center. Once the ROD is published in the Federal Register, the City will pursue funding for the Project by submitting an application to enter the Final Design stage of the New Starts Program.

2.1 Procurement Packaging Contract Summary

Environmental commitments will be tracked according to the procurement contracts that are identified in the *Project Contract Packaging Plan*. The contract packages, packaging method and dates for start and completion of construction are subject to change as the Project proceeds from Preliminary Engineering to Final Design and Construction. Current contract packaging assumptions are described below.

Segment I (West O'ahu/Farrington Highway) is planned to begin construction at the western end of the alignment between East Kapolei and Pearl Highlands. This guideway section and the Maintenance and Storage Facility (MSF) are planned to be constructed using the Design-Build (DB) method of delivery.

Segment II (Kamehameha) of the Project from Pearl Highlands to Aloha Stadium along Kamehameha Highway is planned to be delivered using the DB delivery method.

Segment III (Airport) from Aloha Stadium to the Middle Street Transportation Center Station past Honolulu International Airport and Pearl Harbor is planned to be delivered using the Design-Bid-Build (DBB) delivery method.

Segment IV (City Center) from the Middle Street Transportation Center Station to the Ala Moana Center Station, also is planned to be delivered using the DBB delivery method.

The stations are being designed and constructed using the DBB method of delivery. The stations will be contracted for design and construction in groups of three stations. The parking structure and ramp from H-2 will be contracted separately from the Pearl Highlands Station, and the City will procure the services of a landscape architect for the entire project using the DBB delivery method. Vehicles and systems elements are planned to be manufactured, delivered, and installed to meet the specific needs of each phase of the Project. All vehicles, train control, communications, fare collection equipment, and traction power will be parts of one contract procured as a Design-Build-Operate-Maintain (DBOM) contract.

DTS will procure Service Contracts for Program Management, GEC, and Construction Engineering and Inspection.

3.0 Roles and Responsibilities of DTS and GEC

Lead agencies for the Project are DTS and FTA. DTS is the responsible local agency, the designated recipient of project funds, and a co-lead agency with FTA. RTD, which is a division of DTS, is the entity tasked with development and implementation of the Project.

The GEC will be responsible for implementing the MMP and ensuring contractor compliance with its requirements through design and construction oversight and periodic reviews of contractor documents.

The Project will follow the policies of FTA and DTS. The roles and responsibilities of the PM Team, as well as the contractors, are described in the *Project Management Plan*. Outlined below in 3.1 are the roles and responsibilities related to environmental mitigation monitoring.

3.1 The Project Management Team (PM Team)

The PM Team is comprised of both RTD and its GEC staff with management, environmental, planning, finance, public involvement, procurement, contracting, engineering, and construction management experience. Work will be advanced by a unified team consisting of representatives from both organizations. While the two organizations have formed an integrated team to manage the Project, RTD serves as the lead agency in administration of the Project. Throughout the MMP where references are made to the PM Team as the entity responsible for supporting the development of the Project, it should be noted that such references represent the multi-disciplinary project management team.

The GEC provides day-to-day project oversight. The GEC is responsible for checking that the Final Design and construction by contractors reflect compliance with the Final EIS mitigation measures, and ROD requirements and for developing additional mitigation options as needed to address unforeseen environmental issues during the design and/or construction stages.

The GEC will document mitigation commitment status and ultimate closeout of each mitigation commitment in CMS. Interim completion of the environmental commitments made in the Final EIS and ROD will be achieved when mitigation commitments are incorporated into design plans. Final completion will be documented as part of construction final acceptance. CMS will be used for the PM Team's reporting responsibilities to FTA and FTA's Project Management Oversight Consultant (PMOC) on the status of mitigation commitments during design, construction, and operation.

3.2 GEC Environmental Manager (GEC EM)

The GEC Environmental Planning Manager (GEC EPM) will provide the following:

- Oversees project-wide environmental compliance during design and construction
- Performs periodic review of documents entered in CMS by GEC and contractors
- Supports the GEC ECM with resolution of issues and agency coordination
- Interfaces with Kako'o for implementation of PA stipulations

3.3 RTD Planning and Environment Manager (RTD PEM)

The RTD Planning and Environment Manager (RTD PEM) will provide the following:

- Oversees program-wide environmental compliance
- Performs periodic review of documents entered in CMS by GEC and contractors
- Reviews reports prepared by the GEC ECM to FTA/ PMOC concerning environmental compliance
- Accepts GEC ECM final approval of mitigation measures closeout
- Interfaces with Kako'o for implementation of PA stipulations

3.4 GEC Environmental Compliance Manager (ECM)

The GEC ECM serves as a senior technical authority for environmental planning, compliance and as the GEC contact for Federal, State, and Local regulatory agencies related to environmental issues during design and construction. The GEC ECM oversees activities related to environmental compliance and commitments and has the following responsibilities:

- Oversees all phases (assessment, planning, permit application, construction, and operation) of all environmental compliance activities for the Project, including interfacing with regulatory agencies
- Reviews and comment on environmental studies, reports, plans, designs, contract documents, and permit applications submitted by the GEC and individual contractors
- Reviews project design, contract documents, and cost estimates and verify permit conditions and mitigation requirements are incorporated
- Reviews and verify the construction contractor's work is in compliance with the MMP and regulatory requirements
- Supports the City in reviewing right-of-way, access agreements, hazardous materials inspections reports, and environmental site investigation reports
- Prepares reports on environmental compliance activities and status for use in FTA reports
- Interfaces with Kaka'o for implementation of PA stipulations

3.5 Section 106 Programmatic Agreement Project Manager (Kako'o)

The City is funding a PA Project Manager (Kako'o) to provide oversight, review of deliverables, and reporting required under the terms of the PA, on behalf of the signatories and consulting parties. The Kako'o will coordinate with the GEC EM, RTD PEM, and GEC Architectural Historian and consult with the State Historic Preservation Division (SHPD) and consulting parties, as required, to verify the City's compliance with the PA's stipulations. (See Section 6.0 for additional detail related to the PA.)

3.6 GEC Architectural Historian

On behalf of the City, the GEC Architectural Historian will be responsible for day-to-day PA compliance activities, including reporting, tracking, and review of deliverables stipulated in the PA. This position will coordinate with the GEC EM, GEC ECM, RTD PEM and other members of the PM Team and consult SHPD and consulting parties, as appropriate, to verify compliance of the PA's stipulations. (See Section 6.0 for additional detail related to the PA.)

3.7 GEC Design and Construction Managers (GEC DM) and (GEC CM)

The GEC design and construction managers are responsible for the design and construction of specific construction contracts. They are responsible for the preparation of designs, bid documents, design reports, construction cost estimates, construction schedules, and design calculations for each of the subsequent construction packages. They will be responsible for performing construction support services. These services include review of design submittals, addressing requests for information, change order support, site visits, and construction inspection. The GEC design and construction managers will provide technical support to the GEC ECM for mitigation monitoring.

3.8 GEC Contract Resident Engineer (GEC CRE)

The GEC CRE is responsible for verifying implementation and compliance of the procedures for processing and managing contractor submittals specific to the contract method. The GEC CRE is also responsible for the GEC review and acceptance of final design and construction closeout.

3.9 GEC and RTD Safety and Security Managers (SSM)

The GEC and RTD SSM are responsible for the day-to-day management and implementation of the Safety and Security Certification Plan (SSCP) throughout the entire lifecycle of the Project. RTD has established the Safety and Security Oversight and Review Committee and the Safety and Security Certification Review Committee as forums for facilitating SSCP activities. The RTD SSM will assist the GEC ECM in complying with mitigation measures stipulated in the Final EIS and ROD that are associated with safety and security.

4.0 Environmental Management

The environmental management objectives of the MMP, as described in Section 1.0, will be achieved by the GEC ECM, supported by the GEC EM, CRE, design managers, and construction managers.

4.1 Environmental Compliance Tracking, Database, and Reports

The GEC ECM will maintain a comprehensive and up-to-date record of compliance with the environmental commitments, and permit conditions within CMS. CMS is the software through which commitments will be recorded and reported. The environmental database will serve as a tool for monthly updates and quarterly reporting of the status of environmental commitments to the FTA. Because these commitments may be repetitive across a variety of contracts affecting various Federal, State, and Local agencies or utilities, the database will be expandable to track commitment, responsible party, and status per contract. The database will provide information on the contract or contracts affected by the commitment, the responsible party, monitoring action, status, and closure of the environmental commitment. The database will be configured to print reports, such as commitments applicable to a specific contract, or all commitments associated with a particular permit, agency, or environmental analysis area.

During design and construction, it may be necessary to seek changes to certain environmental commitments. Changes may be warranted if the Project has changed or because new information is required about environmental conditions. Changes to environmental commitments may require additional coordination with the agencies that granted the environmental approvals for the Project and review by FTA.

The GEC EM or GEC ECM will prepare documentation and RTD will notify FTA of changes to the impacts of the Project as described in the Final EIS and ROD. This information will be included in monthly updates and quarterly reports to FTA. The GEC will coordinate with the contractors, agencies, the PM Team, and FTA to verify compliance with commitments or changes to commitments that may be undertaken. The PM Team will provide quarterly environmental compliance reports for submission to FTA that identify the status of environmental commitments.

4.2 Environmental Contract Documents

The PM Team will incorporate the Final EIS, ROD, and PA mitigation commitments and permit requirements and approvals as applicable in procurement documents for all design and construction contracts (Note: may be incorporated by reference).

4.3 Environmental Review during Design and Construction

4.3.1 Design

During Final Design, the GEC will review plans, specifications, and contract documents in accordance with the *HHCTCP Policies and Procedures Submittal Processing* document No. 6.CM-01 (issued May 7, 2010). The GEC will review design for compliance with the contract. The GEC ECM will provide the GEC reviewers the checklists of mitigation commitments to support their review efforts.

The GEC ECM may provide checklists of the mitigation commitments to the contractors to assist them in developing their processes. However, the designers are responsible for identifying applicable mitigation commitments in the Final EIS, ROD, PA and permit conditions.

In addition, during the design phase, the GEC ECM will verify the procedures used by the designers to incorporate environmental commitments into the design. Verification will occur in accordance with the procedures outlined in the Project's *Design Quality Management Plan*. The GEC ECM will review/audit the environmental compliance documentation prepared by the designer to confirm that the environmental commitments are included in the design. The findings will be reported through surveillance reports and/or observation reports in accordance with the Project's quality procedures. The frequency of the reviews/audits will be a function of the performance of the designer; reviews/audits will be more frequent if the initial observation shows substantial need for improvement. At a minimum, reviews/audits of design procedures will be performed in accordance with the Project's quality procedures.

4.3.2 Construction

Prior to the start of construction, construction work plans will be prepared by each contractor to cover specific portions of the Project. These plans will identify key construction activities, staging sequence, schedules, and work locations within specific work sites. Construction planning and environmental compliance with mitigation measures will be performed by each contractor as defined in their respective Environmental Compliance Plan (ECP). The GEC ECM will verify the procedures used by the contractors' for compliance with the ECP and work plans. The GEC ECM will review/audit and comment on work plans as necessary prior to commencement of construction. The contractor will incorporate mitigation measures to particular work site locations as required and as defined in their ECP.

During construction, each contractor will perform daily inspections and monitoring of work activities to confirm compliance with environmental requirements. The contractor will be requested to participate during any environmental compliance inspections performed by outside agencies. He or she also will be invited to participate during spot checks for environmental compliance as performed by the

GEC ECM. This joint-inspection process will be used to enhance communication and verify compliance with mitigation commitments and permit requirements.

The GEC ECM and GEC staff will monitor and audit construction activities to verify compliance with environmental commitments. Similar to design review audits, environmental construction audits will be performed of the contractor's construction monitoring procedures to verify environmental commitments are being met. These audits will include surveillance inspections and observation reporting following the Project's quality procedures.

4.4 Environmental Mitigation Measures Closeout

The GEC ECM is responsible for documenting closeout of environmental mitigation measures. Mitigation closeout measures are defined in Appendix A for each mitigation commitment. Section 5.2 of this MMP describes the mitigation measures closeout process for many of the resource topics. The GEC ECM will review the Project documentation and coordinate with the designers, construction managers, technical resource specialists, and the PM Team as applicable to determine whether the environmental mitigation measure is complete. The GEC ECM will document closeout of each commitment described in the Final EIS and ROD as detailed in Appendix A. The GEC ECM will coordinate with the GEC CRE to document acceptance of final design and construction closeout. The GEC ECM will use CMS to prepare monthly updates and quarterly reports for RTD review and submittal to FTA/PMOC. RTD will review and accept the reports prior to distribution to FTA.

5.0 Environmental Mitigation Monitoring

5.1 Elements of Monitoring Plan by Subject Area

Appendix A groups mitigation measures and commitments into 17 subject areas and describes monitoring under the following column headings. The bulleted list below explains each column heading from left to right:

- **Mitigation ID**—the name of the specific mitigation effort. The ID is the subject area acronym plus a unique identifier number
- **Final EIS Sections**—references the sections in the Final EIS or PA, where this mitigation was discussed
- **Impact**—references the impact, or environmental effect, as identified in the Final EIS
- **Mitigation Measure**—the mitigation action, plan, or process to ameliorate the impact
- **Project-wide (in all contracts) or Contract-specific (if contract-specific, which contract)**—references the specific contract for the mitigation
- **Responsible Party for Implementing Mitigation**—the entity who is accountable for conducting the mitigation

- **Timing of Mitigation Measure (Design, Construction, Operation)**—initial timing and consequent implementation times of mitigation
- **Monitoring Action**—references how compliance of the mitigation measure will be conducted
- **Responsible Party for Monitoring Mitigation**—the entity who is accountable for monitoring
- **Criteria for Completing Mitigation**—the process or action(s) that must be met for mitigation to be verified and signed off as complete

Appendix A has the following subject area elements and each is assigned a unique mitigation ID number for tracking purposes:

- Safety and Security (SS)
- Health and Safety (HS)
- Parking (P)
- Property Acquisition and Displacement (A)
- Community Facilities (CF)
- Visual (V)
- Trees (T)
- Natural Resources (NR)
- Invasive Species (IS)
- Public Involvement (PI)
- Noise and Vibration (NV)
- Hazardous Materials and Waste (HMW)
- Water Resources (W)
- Cultural Resources/Section 4(f) (CR)
- Permits (PM)
- Traffic Management (TM)
- Construction effects (C)

5.2 Environmental Mitigation Measures Closeout Process

Documentation of mitigation closeout will be entered into the CMS environmental compliance tracking database. Compliance will be noted on final design plans or construction closeout documents, and will be approved by the GEC DM, GEC CM, CRE and other technical experts, as appropriate. The ECM will review all necessary documentation to determine whether the criteria for completing the mitigation have been met. This section describes the environmental mitigation measures closeout process for the elements listed below and provides additional explanation than what is summarized in Appendix A.

5.2.1 Mitigation Measures that Require System Operation Planning Documents

During design and construction, the GEC/RTD will be responsible for developing system operation and emergency procedures (SOEP). The CORE Systems DBOM contractor will be tasked with preparing these procedures and the GEC/RTD working group will work with the contractor to help develop them. The

CORE Systems team and GEC/RTD will coordinate with other City and State departments as procedures are developed.

The procedures will include a process to evaluate the effectiveness of the operating and emergency procedures. The GEC/RTD will provide final approval on the CORE Systems SOEP plan. Approval of the operating plan will be the interim documentation that the environmental commitment for safety is satisfied. Documentation that the SOEP plan has been reviewed by GEC/RTD will be entered into the CMS environmental compliance tracking database. The GEC SSM will provide documentation that the Project has met the planned safety requirements for two years after the system began operation.

5.2.2 Mitigation Measures Related to Impacts from Acquisitions and Displacements

RTD is responsible for right-of-way acquisition and will use agreement/acquisition procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the Project's *Real Estate Acquisition Management Plan* (RAMP), which will be monitored separately from this MMP. The GEC ECM will meet with the RTD coordinators monthly and review the monthly reports on real estate acquisition from the *Real Estate Acquisition Database* (READ).

5.2.3 Mitigation Measures Related to Noise Impacts Addressed during Design

The CORE Systems DBOM contractor will be responsible for procurement of transit vehicles. The GEC/RTD will review and comment on the vehicle specifications and inspect the vehicles upon delivery to document that the vehicles are equipped with noise abatement equipment. The GEC/RTD will approve the transit vehicles for properly installed noise abatement equipment prior to acceptance of transit vehicles.

For noise mitigation measures related to guideway design, including parapet walls and sound-absorbing insulation, the GEC will review the contractor's designs to verify that these requirements are included in the guideway design.

5.2.4 Mitigation Measures Related to Noise Impacts Addressed during Operation

The GEC ECM will coordinate the preparation of a transit operation noise monitoring plan and perform noise monitoring in accordance with the plan. The plan will describe the FTA noise impact thresholds and the process for monitoring and reporting. Noise monitoring results will be compared with the criteria in the plan. The GEC ECM will document that required noise measurements were taken and analyzed against FTA noise impact levels. The GEC ECM will develop additional mitigation measures if the measured noise levels exceed FTA acceptable noise impact levels. The noise monitoring plan will become part of the project operation plan. Environmental compliance is completed once the plan is complete and monitoring from the operating phase of all segments is complete.

6.0 Section 106 Programmatic Agreement

The City will represent the interests of the FTA and implement the stipulations identified in the PA. The FTA will ensure that the terms of the PA are carried out and will require, as a condition of any approval of Federal funding for the undertaking, adherence to the stipulations in it.

6.1 Mitigation Measures Related to Impacts to Historic Properties, Archaeological Resources, and Cultural Resources

All the terms and conditions of the Section 106 PA will be adhered to and will be included in the final design, as appropriate. Appendix B (Section 106 PA MMP) describes the mitigation monitoring plan for implementation of the stipulations in the PA. Construction inspection reports will show construction contractor compliance with plans and specifications that include the mitigation commitments included in the Section 106 PA. The GEC ECM will maintain a comprehensive and up-to-date record of compliance with the Section 106 PA stipulations within CMS.

6.1.1 FTA Responsibilities

In compliance with its responsibilities under the National Historic Preservation Act, and as a condition of its funding award to the City under 49 USC §5309 and any other subsequently identified FTA funding of the undertaking, FTA will ensure that the City carries out the stipulated provisions of the PA in accordance with any applicable policy statements and guidelines from the Advisory Council on Historic Preservation (ACHP).

6.1.2 State Historic Preservation Division Responsibilities

The SHPD will specifically review and provide comments for work products completed as part of the PA.

6.1.3 ACHP Responsibilities

The ACHP will provide oversight and advise on disputes.

6.1.4 City Responsibilities

The City will represent the interests of FTA and coordinate all activities described in the PA to carry out the stipulations in the PA. The City will consult with the SHPD and other agency staff, as appropriate, in planning and implementing the stipulations of the PA. The City will submit all plans and documents required by the PA in a timely and accurate manner to the SHPD and other agencies, as stipulated, for review. The City will also ensure that all treatment measures developed by the City and as a result of consultation are compliant with government-wide policies and regulations.

6.1.5 PA Project Manager (Kako'o)

See Section 3.5.

6.1.6 Architectural Historian Role

See Section 3.6.

6.1.7 O'ahu Island Burial Council (OIBC) Role

OIBC has responsibility and jurisdiction to determine the treatment of previously identified Native Hawaiian burial sites pursuant to HAR Chapter 13-300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains. Any iwi kupuna (Native Hawaiian burials) discovered during the AIS shall be treated as previously identified burial sites.

6.2 Elements of the PA Monitoring Plan by Subject Area

Appendix B includes seven column headings. The bulleted list below explains each column heading from left to right:

- **Mitigation ID**—The name of the specific mitigation effort. The ID is the subject area acronym plus a unique identifier number
- **PA Sections**—References the sections in the PA where the stipulation is discussed
- **Commitment from Section 106 PA**—References the commitment as identified in the PA
- **Responsible Parties for Implementing Stipulations (will conduct or oversee action)**—The entity who is accountable for conducting the stipulation
- **Timing**—The specific time (time sensitive) that the action, plan, or process needs to begin
- **Actions or Processes for Implementing Stipulation**—The mitigation action, plan, or process to ameliorate the impact
- **Criteria for Satisfying PA Stipulation/Completing Mitigation**—The process or action(s) that must be met for stipulation/mitigation to be verified and signed off as complete

Appendix A
Mitigation Monitoring Plan (MMP) for Oversight of
Environmental Compliance
Honolulu High-Capacity Transit Corridor Project

November 5, 2010

Prepared for:
City and County of Honolulu

Mitigation ID	Final EIS Section(s)	Impact (Final EIS)	Mitigation Measure (Final EIS)	Project-wide (in all contracts) or Contract-specific (if contract-specific which contract)	Responsible Party for Implementing Mitigation	Timing of Mitigation Measure (Design, Construction, Operation)	Monitoring Action	Responsible Party for Monitoring Mitigation	Criteria for Completing Mitigation
Safety and Security									
SS01	2.5.4 4.6.3 4.18.7	General safety and security for transit users and surrounding community.	<p>A project-specific Safety and Security Management Plan has been developed by the General Engineering Consultant (GEC) and City and County of Honolulu Department of Transportation Services Rapid Transit Division (RTD) in accordance with FTA requirements to define the safety and security activities and methods for identifying, evaluating, and resolving potential safety hazards and security vulnerabilities of these systems. It establishes responsibility and accountability for safety and security during the Preliminary Engineering, Final Design, construction, testing, and start-up phases of the Project.</p> <p>The contractor is required to participate in the Project Safety and Security Certification Program (SSCP) throughout the duration of the Contract. At a minimum, the contractor shall develop a contractor SSCP for the Final Design, construction, and testing phases of the Project in conformance with the Project Safety and Security Management Plan (SSMP) and the Federal Transit Administration (FTA) document, <i>Handbook for Transit Safety and Security Certification</i>.</p>	Project-wide	GEC/RTD prepares the plan. The designer, contractor, and operator will write the Safety and Security Certification Plan for the Final Design, construction, and testing phases of the Project in conformance with the Project Safety and Security Management Plan and implement the plan.	Plan to be written, approved, and implemented prior to the start of construction. Implementation of the plan has already begun with Preliminary Design and coordination with local emergency service providers.	Compliance checked by separate, review and documentation in SSCP per Safety and Security Special Provisions. The GEC Environmental Compliance Manager (ECM) will audit the processes of the SSMP to demonstrate compliance of safety and security. RTD has established the Safety and Security Oversight and Review Committee and the Safety and Security Certification Review Committee as forums for facilitating SSCP activities. The RTD Safety and Security Managers (SSM) will assist the GEC ECM in complying with mitigation measures stipulated in the Final Environmental Impact Statement (Final EIS) and Record of Decision (ROD) that are associated with safety and security.	GEC Safety and Security Manager (SSM) RTD SSM	The plan will include a process for the Safety and Security Certification Program to audit the effectiveness of the operating and emergency procedures. ECM will note compliance by reviewing documenting compliance checked by the GEC and RTD SSM.
SS02	2.5.4	Security and safety could be compromised at potentially sensitive locations along the transit corridor.	A Threat and Vulnerability Analysis has been prepared to identify security weaknesses created at potentially sensitive locations by the Project.	Specific locations along the entire transit corridor, such as near the Federal Courthouse on Halekauwila Street	The designers and contractors will implement measures.	Prior to the start of design activities.	Compliance checked by separate, review and documentation in Safety and Security Certification Program per Safety and Security Special Provisions.	GEC Contract Resident Engineer (CRE) GEC ECM	Design and construction completed in sensitive locations. Design compliance noted on Final Design plans and signed off by GEC Design Manager (DM) and CRE as needed. Final compliance noted by ECM review and acceptance of construction closeout report.
SS03	4.5.3	General safety and security for transit users and the surrounding communities.	To promote public safety, the City will provide security patrols of transit property and vehicles, ongoing train safety awareness education, and ongoing public security awareness education.	Project -wide	The City will implement the security operations.	During transit system operation.	Compliance checked by separate review and documentation in Safety and Security Certification Program per Safety and Security Special Provisions.	GEC ECM	Design-Build-Operate-Maintain (DBOM) Contractor prepares operation plans. GEC/RTD reviews and provides comments on plans. The plan will include a process to evaluate the effectiveness of the operating procedures and education programs.

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Health and Safety									
HS01	4.18.7	Workers and the general public may be exposed to toxic and hazardous substances during construction of the transit system.	Construction Health and Safety Management Plan—, developed by the construction contractor, will meet the requirements of 29 CFR 1910 and 1926 and all other applicable Federal, State, and Local regulations and requirements. It will also include provisions for identifying asbestos and lead-based paint that will be disturbed by the Project.	Project-wide	All construction contractors for all construction contracts.	Plan to be written, approved and implemented prior to the start of construction activities and will be ongoing during construction activities.	Verify compliance by having construction contractors submit Construction Health and Safety Management Plan and review it against the requirements of 29 CFR 1910 and 1926 and technical specifications.	GEC CRE GEC ECM	Design compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.
Parking									
P01	3.4.7	A review of ridership forecasts at each project station indicates that some guideway transit passengers may park near stations that do not have designated parking.	Parking surveys will be conducted prior to starting construction of a station, and again within six months after opening of the station. Results of the surveys will be used to determine the appropriate mitigation strategy, which will be selected by the City and implemented as soon as feasible. Follow-up surveys will be conducted by the City to determine if the mitigation strategies are effective. Additional mitigation measures will be implemented by the City as needed. Strategies include, but are not limited to, the following: <ul style="list-style-type: none"> • Parking restrictions (where parked cars cause safety or congestion problems) • Parking regulation (e.g., meters, time limits, or other methods to encourage turnover) • Permit parking (e.g., resident or employee parking) • Shared parking arrangements (at locations where parking is available but dedicated to another purpose, such as retail centers, office uses, or places of worship) 	Project-wide in neighborhoods around station locations	City/RTD	Prior to the start of construction and six months after operation.	Compliance checked by separate, review of survey methodology and survey results. Documentation of this review will be kept in project files. Conduct a follow up survey to determine if the selected mitigation was appropriate.	GEC ECM	GEC/RTD will prepare parking survey plan. Final compliance noted by ECM review and acceptance of parking survey report. RTD will share the results of the parking survey with DPP as needed.
P02	3.4.4 3.4.7 7.3.1 8.6.11	It is estimated that approximately 690 off-street parking spaces will be removed.	Off-street privately owned parking spaces needed to construct the guideway or stations will be acquired by the City in accordance with the requirements of the U.S. Uniform Relocation Assistance and Real Property Acquisition Policies Act.	Project-wide	City/RTD	Prior to the start of construction activities.	Check reports and communicate with RTD right-of-way (ROW) staff as needed prior to monthly updates and quarterly reports. Review documentation of the following with ROW staff: <ul style="list-style-type: none"> (1) That all acquisitions are performed in accordance with the requirements of the U.S. Uniform Relocation Assistance and Real Property Acquisition Policies Act (2) That all land owners were paid fair-market value for the land including the value of the parking spaces (3) That land owners were able to replace parking spaces as appropriate. 	RTD	RTD will review documentation, including use agreement/ acquisition or replacement procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the RAMP, which will be monitored separately from this MMP.

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P03	3.4.7	Two passenger loading zones will be affected by the Project: a passenger loading zone on Halekauwila Street near South Street and a passenger loading zone on Halekauwila Street near Kamani Street.	Mitigation measures for passenger loading zones include the following: <ul style="list-style-type: none"> The passenger loading zone used for a day-care facility on Halekauwila Street between 'Āhui and Kamani Streets will be relocated nearby on Ilaniwai Street from Cooke Street to Kamani Street. As a result, some of the existing on-street parking on Ilaniwai Street will be converted to passenger loading zones during the A.M. and P.M. peak periods. A new passenger loading zone on Halekauwila Street between Punchbowl and South Streets will be installed in the same general location after construction is completed. 	Segment IV City Center Contract	Guideway Design Contractor	Prior to the start of construction activities.	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify mitigation during construction through review of construction monitoring reports.	GEC CRE GEC ECM	Review design plans for compliance, as noted on Final Design plans, and signed off by GEC DM and CRE as needed. Compliance verification given by ECM after GEC ECM coordinates with the GEC CRE to document acceptance of final design and construction closeout.
P04	3.4.7	One freight loading zone on Ka'aahi Street will be affected by the Project.	A freight loading zone on Ka'aahi Street will be relocated nearby.	Segment IV City Center Contract	Guideway Design Contractor	Prior to the start of construction activities.	Verify compliance that permanent relocation of loading zone to a new location is included in design. Verify restoration through review of construction monitoring reports.	GEC CRE GEC ECM	Review design plans for compliance, as noted on Final Design plans, and signed off by GEC DM and CRE as needed. Compliance verification given by ECM after review and acceptance of construction closeout report.
P05	3.4.7	Relocation of parking spaces at Leeward Community College.	The Leeward Community College Station will be built on the mauka end of the existing parking lot. Parking spaces will be replaced at an alternate location on campus. The City will coordinate with Leeward Community College during Final Design to relocate parking.	Segment I WOFH Contract	Station Design-Build Contractor	Prior to the start of construction activities during Final Design.	Verify compliance by review of design plans. Verify relocation through review of construction monitoring reports.	GEC CRE GEC ECM	Review design plans for compliance, as noted on Final Design plans, and signed off by GEC DM and CRE as needed. Compliance verification given by ECM after review and acceptance of construction closeout report.
P06	3.4.7	Relocation of parking spaces in Ke'ehi Lagoon Beach Park.	Parking spaces in Ke'ehi Lagoon Beach Park used by the Project will be relocated within the park. There will be no net loss in parking.	Segment III Airport Contract	Guideway Design Contractor	Prior to the start of construction activities.	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify restoration through review of construction monitoring reports.	GEC CRE GEC ECM	Review design plans for compliance, as noted on Final Design plans, and signed off by GEC DM and CRE as needed. Compliance verification given by ECM after review and acceptance of construction closeout report.
P07	3.4.7	It is estimated that approximately 175 on-street parking spaces will be removed as a result of the Project.	Some new on-street parking spaces will be created by construction of the Project as streets are rebuilt after construction. The number and location will depend on the final configuration of the guideway and station foot-prints. New parking spaces will be designated as short-term, long-term, or loading zones, depending on the need, as determined by the City.	Project-wide	Guideway Design Contractor	During Final Design	Coordinate with the City to determine parking needs. Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify through review of construction monitoring reports.	GEC CRE GEC ECM	Review design plans for compliance, as noted on Final Design plans, and signed off by GEC DM and CRE as needed. Compliance verification given by ECM after review and acceptance of construction closeout report.

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Property Acquisition and Displacements									
A01	4.4.3 4.7.3	Private property will be acquired and businesses displaced in order for the City to obtain dedicated right-of-way for the transit corridor.	Where relocations will occur, compensation will be provided to affected property owners, businesses, or residents in compliance with all applicable Federal and State laws and will follow the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR 24).	Project-wide	RTD right-of-way team	Design and right-of-way acquisition	RTD is responsible for ROW acquisition and will use agreement/acquisition procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the Project's Real Estate Acquisition Management Plan (RAMP), which will be monitored separately from this MMP. The GEC ECM will meet with the RTD coordinators monthly and review the monthly reports on real estate acquisition from the Real Estate Acquisition Database (READ).	GEC ECM RTD right-of-way (ROW) staff	Right-of way coordinators will provide compliance documentation per the READ, which will be monitored separately from this MMP.
A02	4.4.3	Businesses and residents will be displaced in order for RTD to obtain dedicated right-of-way for the transit corridor.	The City will assist all affected persons in locating suitable replacement housing and business sites within an individual's or business's financial means.	Project-wide	GEC/RTD	Design and right-of-way acquisition	RTD is responsible for ROW acquisition and will use agreement/acquisition procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the Project's Real Estate Acquisition Management Plan (RAMP), which will be monitored separately from this MMP. The GEC ECM will meet with the RTD coordinators monthly and review the monthly reports on real estate acquisition from the Real Estate Acquisition Database (READ).	GEC ECM RTD ROW staff	Right-of way coordinators will provide compliance documentation per the READ, which will be monitored separately from this MMP.
A03	4.4.3	Businesses and residents will be displaced in order for RTD to obtain dedicated right-of-way for the transit corridor.	A minimum 90-day written notice will be provided before any business or resident will be required to move.	Project-wide	GEC/RTD	Design and right-of-way acquisition	RTD is responsible for ROW acquisition and will use agreement/acquisition procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the Project's Real Estate Acquisition Management Plan (RAMP), which will be monitored separately from this MMP. The GEC ECM will meet with the RTD coordinators monthly and review the monthly reports on real estate acquisition from the Real Estate Acquisition Database (READ).	GEC ECM RTD ROW staff	Right-of way coordinators will provide compliance documentation per the READ, which will be monitored separately from this MMP.

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A04	4.4.3	Businesses and residents will be displaced in order for RTD to obtain dedicated right-of-way for the transit corridor.	Relocation services will be provided to all affected business and residential property owners and tenants without discrimination; persons, businesses, or organizations that are displaced as a result of the Project will be treated fairly and equitably.	Project-wide	GEC/RTD	Design and right-of-way acquisition.	RTD is responsible for ROW acquisition and will use agreement/acquisition procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the Project's Real Estate Acquisition Management Plan (RAMP), which will be monitored separately from this MMP. The GEC ECM will meet with the RTD coordinators monthly and review the monthly reports on real estate acquisition from the Real Estate Acquisition Database (READ).	GEC ECM RTD ROW staff	Right-of way coordinators will provide compliance documentation per the READ, which will be monitored separately from this MMP.
A05	4.4.3 4.5.3	Non-acquisition impacts to property features and property access.	Where landscaping, sidewalks, and driveway access will be affected by the Project, coordination will occur with the landowner, and these property features will be replaced and/ or the property owner will be compensated in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act.	Project-wide	GEC/RTD in cooperation with the construction contractor will implement the coordination and/or replacement.	Construction	RTD is responsible for ROW acquisition and will use agreement/acquisition procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the Project's Real Estate Acquisition Management Plan (RAMP), which will be monitored separately from this MMP. The GEC ECM will meet with the RTD coordinators monthly and review the monthly reports on real estate acquisition from the Real Estate Acquisition Database (READ).	GEC ECM RTD ROW staff	Right-of way coordinators will provide compliance documentation per the READ, which will be monitored separately from this MMP. Compliance noted by ECM review and acceptance verified in construction closeout report.
A06	4.4.3	Ceded lands will be impacted by right-of-way requirements for the Project.	For land designed as ceded lands within the project right-of-way, ownership of these lands will not change. The City will obtain the appropriate permissions from the State for any ceded lands needed for the Project.	Project-wide	The City will obtain the appropriate permissions from the State for any ceded land needed for the Project.	Design and right-of-way acquisition	RTD is responsible for ROW acquisition and will use agreement/acquisition procedures, following all applicable guidelines and regulations. Right-of way coordinators will provide compliance documentation per the Project's Real Estate Acquisition Management Plan (RAMP), which will be monitored separately from this MMP. The GEC ECM will meet with the RTD coordinators monthly and review the monthly reports on real estate acquisition from the Real Estate Acquisition Database (READ).	GEC ECM	ECM verifies through coordination with RTD right-of-way staff.

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A07	4.5.3 Table 4-6	Parks and recreational resources will be impacted due to partial acquisitions.	Effects to parks and recreational resources from partial acquisitions will be mitigated in coordination with parkland property owners as follows: <ul style="list-style-type: none"> Pearl Harbor Bike Path—The City will provide a temporary crossing over the trench to maintain bikeway access during construction. The bicycle path will be repaved in the affected area, and surrounding plantings disturbed by construction will be restored. Future Middle Loch Park—The area will be restored when outfall construction is complete, and surrounding plantings disturbed by construction will be restored Aloha Stadium—Transit will provide additional access to the stadium. Kamehameha lot will be paved as a shared-use parking area. The shared park-and-ride will be used for stadium events. 	Pearl Harbor Maintenance and Storage Facility (MSF) Design Build Contract Future Middle Loch Park—MSF Design Build Contract Aloha Stadium Segment III Airport Contract	MSF Design Builder Park-and-ride lot designer and construction contractor Segment III designer and construction contractor	Design and construction	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of construction closeout report.
Community Facilities									
CF01	4.5.3 Table 4-6	Community facilities at education centers are impacted due to partial acquisitions.	Property use agreement or acquisition will be negotiated with the University of Hawai'i System. Light posts will be replaced at Honolulu Community College.	Segment IV City Center Contract	Segment IV Design-Build contractor	Design and construction	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify replacement through review of construction monitoring reports.	GEC CRE GEC ECM	Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of construction closeout report.
CF02	4.5.3 Table 4-6	Community facilities at education facilities are impacted due to partial acquisitions.	The affected portable buildings at Waipahu High School will be replaced or relocated on school property. A retaining wall and new access road to the football field will be provided.	Segment I WOFH Contract	Segment 1 Design-Build contractor	Design and construction	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify replacement or relocation and construction of retaining wall and access road through review of construction monitoring reports.	GEC CRE GEC ECM	Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of construction closeout report.

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CF03	4.5.3 3.4.4 Table 4-6	Community facilities at education facilities are impacted due to partial acquisitions.	The portable administration buildings and parking spaces will be relocated at Leeward Community College. There will be no net loss of parking. Property use agreement or acquisition will be negotiated with the University of Hawai'i System.	Segment I WOFH Contract	Segment 1 Design-Build contractor	Design and construction	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify restoration through review of construction monitoring reports.	GEC CRE GEC ECM RTD ROW staff	Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. GEC ECM verifies that right-of way staff has complied with the RAMP. Right-of way coordinators will provide compliance documentation per the READ, which will be monitored separately from this MMP. Final compliance noted by GEC ECM review and acceptance of construction closeout report.
CF04	4.5.3 Table 4-6	Community facilities at Federal facilities are impacted due to partial acquisitions.	Property use agreement or acquisition will be negotiated with the Federal government for Nimitz Field.	Segment III Airport Contract	GEC/RTD	Design and right-of-way acquisition	Compliance checked by separate GEC/RTD real estate documentation.	GEC ECM RTD Right-of-way staff	GEC ECM coordinates with RTD to verify that right-of way coordinators have complied with the RAMP.
CF05	4.5.3 Table 4-6	Transit guideway construction will interfere with recreational use of the existing tennis courts within Ke'e'hi Lagoon Beach Park.	Lighted tennis courts will be relocated within Ke'e'hi Lagoon Beach Park. The City will provide lighting and associated resurfacing for four of the tennis courts near the park entrance prior to construction so that nighttime tennis court use will be maintained during construction. After construction, the four tennis courts that will be closed during construction will be restored in their original location.	Segment III Airport Contract	Segment III Guideway Designer and Segment III Guideway Contractor	Design, construction, and operation	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify compliance during construction by monitoring contractor performance to ensure that the tennis courts are relocated prior to initiating guideway construction in Ke'e'hi Lagoon Beach Park.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of construction closeout report.
CF06	4.5.3 Table 4-6	Community facilities at public recreational facilities are impacted due to partial acquisitions.	The Project will be a transportation benefit to Aloha Stadium and provide additional access. The unpaved parking area will be paved as a shared-use parking area. The shared park-and-ride will be used for stadium events.	Segment III Airport Contract	Segment III designer and construction contractor	Design, construction, and operation	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify restoration through review of construction monitoring reports.	GEC CRE GEC ECM	Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. GEC ECM verifies that right-of way coordinators have complied with the RAMP. Final compliance noted by GEC ECM review and acceptance of construction closeout report.
CF07	4.5.3 Table 4-6	Community facilities at Federal facilities are impacted due to partial acquisitions.	Property use agreement or acquisition will be negotiated with the Federal government for federal facilities (Pearl City Post Office, Honolulu Post Office, Prince Kūhiō Kalaniana'ole Federal Building/Courthouse, and Pearl Harbor Complex).	Segment II Kamehameha, Segment III Airport, and Segment IV City Center Contracts	GEC/RTD	Design and right-of-way acquisition	Compliance checked by separate GEC/RTD READ.	GEC ECM RTD Right-of-way staff	GEC ECM coordinates with RTD right-of-way staff to verify that right-of way coordinators have complied with the RAMP.
CF08	4.5.3 Table 4-6	State facilities are impacted due to partial acquisitions.	Property use agreement or acquisition will be negotiated with the State for the O'ahu Correctional Facility and Honolulu International Airport (coordination with FAA).	Segment III Airport and Segment IV City Center Contracts	GEC/RTD	Design and right-of-way acquisition	Compliance checked by separate GEC/RTD READ.	GEC ECM RTD Right-of-way staff	GEC ECM coordinates with RTD right-of-way staff to verify that right-of way coordinators have complied with the RAMP

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CF09	4.5.3 Table 4-6 4.7.3	Religious institution impacted by full property acquisition.	Alpha Omega Christian Fellowship Church will be acquired in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act and will be consistent with the Real Estate Acquisition Management Plan (DTS 2008q).	Segment I WOFH	GEC/RTD	Design and right-of-way acquisition	Compliance checked by separate GEC/RTD real estate documentation.	GEC ECM RTD Right-of-way staff	GEC ECM coordinates with RTD right-of-way staff to verify that right-of way coordinators have complied with the RAMP
CF010	4.5.3	Presence of elevated guideway and stations will disrupt existing streetscape.	The City will coordinate and consult with other agencies and stakeholders on the Final Design of the streetscape affected by the Project.	Project-wide	Design contractors for all segments, including guideway and stations.	Design	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of construction closeout report.
Visual									
V01	4.8.3	Significant visual effects will result, particularly when considered at a single location. Residents living in high-rise buildings adjacent to the project alignment will experience varied visual changes as a result of the Project.	Develop and apply design guidelines that will establish a consistent design framework for the Project with consideration of local context.	Project-wide	Design contractors for all segments, including guideway and stations.	Design	Check Final Design documents for specific mitigation measures for visual are incorporated into the design and construction plans and specifications. Confirm that plans are prepared following the design principles identified in the <i>Honolulu High-Capacity Transit Corridor Project Compendium of Design Criteria</i> (RTD 2009o).	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC project architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.
V02	4.8.3	The fixed guideway and stations will be elevated structures. They will noticeably change views where project elements will be near existing views or in the foreground of these views. This change will also occur for motorists traveling on roadways along and under the guideway.	Coordinate the project design with City Transit Oriented Development TOD planning and Department of Planning and Permitting (DPP). As part of the Final Design process, the City has developed specifications and design criteria to address the City's requirements for the Project. Guideway materials and surface textures will be selected in accordance with generally accepted architectural principles to achieve effected integration between the guideway and its surrounding environment.	Project-wide	Design contractors for all segments, including guideway and stations.	Design	Review meeting minutes for Transit Oriented Development (TOD) coordination. Check Final Design documents for mitigation measures specific to TOD are incorporated into the design and construction plans and specifications; Confirm that plans are prepared following the design principals identified in the <i>Honolulu High-Capacity Transit Corridor Project Compendium of Design Criteria</i> (RTD 2009o).	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC project architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.
V03	4.8.3 8.7	The stations will be elevated structures. They will noticeably change views where project elements will be near historical structures or in the foreground of views of historical structures.	Consult with the communities surrounding each station for input on station design elements. The City is conducting a series of station design workshops to solicit community and Section 106 consulting party input and ideas about station design elements and the interface between each station and the surrounding community.	Project-wide	Design contractors for all stations.	Design	Review community workshop documentation by GEC ECM with evidence that the opportunity for community input has been provided for station designs. Reference relevant stipulation in the Programmatic Agreement Monitoring Plan.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC project architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.

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V04	4.8.3 4.15.3	The fixed guideway and stations will be elevated structures. They will noticeably change views where project elements will be near existing views or in the foreground of these views.	Consider specific sites for landscaping and trees during the Final Design phase when plans for new plantings will be prepared by a landscape architect. Landscape and streetscape improvements will mitigate potential visual impacts.	Project-wide	Design contractors for all segments, including guideway and stations.	Design	Check that landscape plan (design documents) shows locations for landscaping and trees that are consistent with the design principles identified in the <i>Honolulu High-Capacity Transit Corridor Project Compendium of Design Criteria</i> (RTD 2009o).	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC project architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.
V05	4.8.3 Appendix H	The fixed guideway and stations will be elevated structures. They will noticeably change views where project elements will be near historical structures or in the foreground of views of historical structures.	The City will implement Design Standard requirements as set forth in Section IV of the Section 106 Programmatic Agreement (PA), including the completion of neighborhood design workshops and the review of preliminary designs by the PA signatories and concurring parties.	Project-wide	Design contractors for all segments, including guideway and stations.	Design	Review of community workshop documentation by GEC ECM with evidence that the opportunity for community input has been provided for station designs. Reference the Programmatic Agreement Monitoring Plan.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC project architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.
Trees									
T01	4.1 4.15.3	Construction of the guideway and stations will result in the loss of street trees.	Transplanting existing trees to areas as close to their original locations as feasible or planting new ones. If new plantings will not offer equitable mitigation (e.g., older mature trees that are removed), additional younger trees could be planted that will, in time, develop similar benefits.	Project-wide	All segment designers and construction contractors.	Design and construction	Compliance documented by GEC/RTD landscape architects' review of landscaping plans to verify that relocation of trees, transplanting of existing trees, and planting of new trees complies with the landscape architecture design criteria.	GEC CRE GEC ECM	Compliance noted on final landscaping design plans and signed off by GEC project landscape architects. Final compliance noted by ECM review and acceptance of approval by GEC project landscape architects.
T02	4.1	Construction of the guideway and stations will result in the loss of street trees.	Existing street trees will be transplanted or new trees will be planted. Street tree pruning, removal, and planting will comply with City and County ordinances and require supervision by a certified arborist. The City will coordinate with the HDOT landscape architect.	Project-wide	All segment designers and construction contractors.	Design and construction	Compliance documented by GEC/RTD landscape architects' review of landscaping plans to verify that relocation of trees, transplanting of existing trees, and planting of new trees complies with the landscape architecture design criteria.	GEC CRE GEC ECM	Compliance noted on final landscaping design plans and signed off by GEC project landscape architects. Final compliance noted by ECM review and acceptance of approval by GEC project landscape architects.

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T03	4.15.3 4.18.8	Construction of the guideway and stations will result in the loss of street trees.	Effects to street trees will be mitigated by transplanting existing trees to areas as close to their original location as feasible or planting new ones. Among the trees that require removal but could be transplanted are most of the trees along Farrington Highway. The location where street trees will be transplanted will be selected based on project-specific criteria that could include the following: areas where existing landscaping will be lost along the study corridor; areas where opportunities exist for enhancing existing streetscapes near the study corridor; areas where stations and parking lots will be constructed; and areas where shared benefits will be accomplished, such as areas adjacent to parks or historic sites	Project-wide	All segment designers and construction contractors.	Design and construction	Compliance documented by GEC/RTD landscape architects' review of the landscaping plans to verify that relocation of trees, transplanting of existing trees, and planting of new trees complies with the landscape architecture design criteria.	GEC CRE GEC ECM	Compliance noted on final landscaping design plans and signed off by GEC project landscape architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.
T04	4.15.3	Construction of the guideway and stations will result in the loss of street trees.	Trees suitable for transplanting displaced by construction will be relocated to a City project nursery until they can be transplanted to another part of the project area. The City will coordinate with HDOT's highway landscape architect.	Project-wide	All segment designers and construction contractors.	Design and construction	Compliance documented by GEC/RTD landscape architects' review of the landscaping plans to verify that relocation of trees, transplanting of existing trees, and planting of new trees complies with the landscape architecture design criteria.	GEC CRE GEC ECM	Compliance noted on final landscaping design plans and signed off by GEC project landscape architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.
Natural Resources									
NR01	4.13.3	Plant species and their habitats protected by the Endangered Species Act may be impacted by guideway construction.	The City will secure a Certificate of Inclusion from the State in the existing Habitat Conservation Plan (HCP) and follow all the measures and requirements in the existing HCP. If a new HCP is needed, or the existing HCP needs to be amended because additional plants are found outside the existing HCP area, the City will implement the measures outlined by the USFWS in the new or amended HCP.	Segment I WOFH Contract	The GEC together with the City will secure the Certificate of Inclusion.	Design	Compliance documented by GEC/ environmental specialists after review of the clearing and grubbing plan.	GEC ECM	Documentation of compliance with HCP through correspondence and reporting to Hawaii Department of Transportation (HDOT) and Hawaii Department of Land and Natural Resources HDLNR.
Invasive Species									
IS01	2.5	Revegetation of disturbed areas could introduce invasive plant species.	New plantings will be non-invasive as defined by the Hawai'i Chapter of the American Society of Landscape Architects, and native plants will be included where appropriate.	Project-wide	All segment designers and construction contractors.	Design and construction	Compliance documented by GEC landscape architects' review of the landscaping plans to verify that relocation of trees, transplanting of existing trees, and planting of new trees complies with the landscape architecture design criteria.	GEC CRE GEC ECM	Compliance noted on final landscaping design plans and signed off by GEC project landscape architects. Final compliance noted by ECM review and acceptance of approval by GEC project architects.

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Public Involvement									
PI01	8.7 3.5.7	Impact to the traveling public.	Public involvement activities will continue throughout the construction period. Intelligent Transportation System (ITS) information regarding traveler information or incident management will be distributed through both daily and instant public involvement means. The project website will continue to be the primary information source for up-to-date project information. In addition, the project hotline and newsletter, local newspapers, radio and/or television spots, news releases, instant messaging lists, and flyers may be used to provide information to the public.	Project-wide	The City in conjunction with contractor PI staff	Design and construction	Quarterly, monthly, and weekly planning reviews of tactics, messages, and use of technology in Public Awareness and Community Relations Program.	RTD Public Information Officer GEC ECM /RTD	Each contractor will be required to prepare a Public Awareness and Community Relations Program. This written program will outline notification procedures that meet or exceed the Table of Notifications in Special Provision contract documents. Final compliance noted by ECM review and acceptance of Public Awareness and Community Relations Program closeout report.
Noise and Vibration									
NV01	4.10.3	Moderate noise impacts would occur at ground level for 50 residences.	Wheel skirts were added to the vehicle specifications to reduce noise generated from the Project. Wheel skirts will reduce noise-exposure levels to below the FTA impact criteria at five of the eight locations where impacts are predicted.	Project-wide	CORE Systems design-build-operator	Design	Document that the prescribed mitigation measure has been added to the vehicle design and contractor specifications.	GEC CRE GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare vehicle specifications to include noise abatement equipment. GEC/RTD will review and comment on specifications and inspect vehicles prior to acceptance. Interim compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of RTD approval of vehicles.
NV02	4.1 4.10.3	Moderate noise impacts would occur between the fifth and eleventh floors of four high-rise buildings.	Sound-absorptive materials will be added within the guideway structure in the vicinity of anticipated impacts at three separate locations to mitigate moderate impacts at upper floors of a few high-rise buildings. Eight-hundred feet of sound-absorptive material will be installed from Pupukahi Street to Pupupuhi Street. For the building at 860 Halekauwila Street, sound-absorptive material will be required from 200 feet 'Ewa of Kamani Street to 100 feet Koko Head of Kamani Street; a total of 300 feet. The building at 1133 Waimanu will require sound-absorptive material to be installed between Kamake'e Street and Waimanu Street for a total of 920 feet.	Segment I WOFH and Segment IV City Center Contracts	Guideway contractors	Design	Document that the prescribed mitigation measure has been added to the guideway design and contractor specifications.	GEC CRE GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare track specifications to include noise abatement equipment. GEC/RTD will review and comment on specifications and inspect equipment prior to acceptance. Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of RTD approval of noise abatement equipment.

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NV03	4.10.3	Moderate noise impacts would occur at eight areas.	Once the Project is operating, field measurements for noise will be conducted at representative sites. Should the Project's noise impacts exceed the FTA noise impact levels, further mitigation may be implemented on the receivers with the authorization of the property owners.	Project-wide at these specific locations: West Loch to Waipahu Transit Center (2), Waipahu Transit Center to Leeward Community College, Aloha Stadium to Pearl Harbor Naval Base (2), Downtown to Civic Center, Civic Center to Kaka'ako, Kaka'ako to Ala Moana Center	GEC prepares the plan. The CORE Systems design-build-operator will implement the plan once the Project is operating.	Operation	Field measurements will be conducted at representative sites where moderate noise levels are anticipated and a determination will be made whether any measurements show a noise impact when compared to FTA noise impact levels. If so, further mitigation may need to be implemented and coordination with individual property owners will need to occur.	GEC ECM	GEC prepare transit operation noise monitoring plan and perform monitoring during operation of the first phase of each segment of the Project. Noise monitoring will be included in the project operation plan. Final compliance noted by ECM review and acceptance of noise monitoring report.
NV04	4.10.3	Moderate noise impacts would occur between the fifth and eleventh floors of four high-rise buildings.	The elevated guideway will include a parapet wall on both sides of the guideway that extends 3 feet above the top of the rail.	Project-wide	Guideway designer and contractor	Design	Document that the prescribed mitigation measure has been added to the guideway design and contractor specifications.	GEC CRE GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare track specifications to include noise abatement equipment. GEC will review and comment on specifications and inspect equipment prior to acceptance. Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of RTD approval of noise abatement equipment.
NV05	4.10.3	The greatest noise source from the traction power substations will be air-conditioning equipment.	FTA and the City commit to requiring in the specifications for all traction power substations for the Project that the noise generated by the substations measured at the nearest property line be an hourly Leq of 45 dBA or less in areas zoned single-family residential, conservation, preservation, or similar type and 50 dBA Leq or less in areas zoned multifamily residential, business, resort, or similar type in accordance with Hawai'i state law (HAR 11-46).	Project-wide	CORE Systems	Design and operation	Document that the prescribed mitigation measure has been added to the guideway design and contractor specifications. Once the Project is operational, adequate noise measurements must be taken to verify that noise levels are not higher than the thresholds stated as part of the mitigation commitment.	GEC CRE GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare traction power substation specifications to include noise abatement equipment. GEC/RTD will review and comment on specifications and inspect equipment prior to acceptance. Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of RTD approval of noise abatement equipment.

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NV06	4.10.3	Noise sources at the maintenance and storage facility will include trains operating and switching within the facility, as well as maintenance and cleaning activities. These activities will occur over a 24-hour period. Wheel squeal is not expected within the maintenance and storage facility but could occur.	The two curved tracks in the maintenance and storage yard that are nearest the main building of Leeward Community College will have automatic track lubrication devices installed to eliminate any wheel squeal on those curves.	Segment I WOFH Contract, specific to Maintenance Yard and Storage Facilities	Guideway contractor	Design	Document that the prescribed mitigation measure has been added to the guideway design and contractor specifications.	GEC CRE GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare track specifications to include noise abatement equipment. GEC/RTD will review and comment on specifications and inspect equipment prior to acceptance. Interim compliance noted on Final Design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of RTD approval of noise abatement equipment.
Hazardous Materials and Waste									
HMW01	4.1 4.12.3	In some locations, large or specialized hazardous wastes or materials sites may be acquired for needed right-of-way for the Project.	The City will perform either a partial or complete Phase I Environmental Site Assessment for properties that will be acquired for the Project. Depending on the outcome, a Phase II Environmental Site Assessment (including collecting and analyzing samples) may be appropriate. The City will decide whether a partial or complete Phase I Environmental Assessment is necessary for each property prior to acquisition. If contaminated materials are identified, the property will be remediated in accordance with Federal, State, and Local Regulations. The City will coordinate with HDOT regarding work within HDOT right-of-way.	Project-wide	GEC/RTD	Design	Document that the Phase I and Phase II Environmental Site Assessments have been completed and that properties determined to have contaminated materials are identified and remediated in accordance with Federal, State, and Local regulations. In addition, document coordination efforts that occur between the City and HDOT regarding work within HDOT right-of-way.	GEC ECM	Final compliance noted by ECM review and acceptance of Environmental Site Assessment Reports and Remediation Reports.
HMW02	4.12.3	The operation and maintenance of a fixed guideway transit system will require the use of some hazardous materials and may generate hazardous waste.	Non-hazardous alternatives to hazardous materials will be used where possible, as described in the Construction Health and Safety Plan.	Project-wide	CORE Systems design-build-operator	Operation	Review and confirm from contractor bi-weekly reports that non-hazardous material options have been used in place of hazardous materials where possible.	GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare track specifications to include non-hazardous chemical alternatives. GEC will review and comment on specifications and inspect chemicals prior to acceptance. Final compliance noted by ECM review and acceptance of RTD approval chemicals.

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HMW03	4.12.3	The operation and maintenance of a fixed guideway transit system will require the use of some hazardous materials and may generate hazardous waste.	Use closed systems for circulating hazardous materials designed to limit exposure, as described in the Construction Health and Safety Plan.	Project-wide	CORE Systems design-build-operator	Operation	Document that the prescribed mitigation measure has been incorporated into the Project's maintenance plan and Hazardous Materials Health and Safety Plan.	GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare track specifications to include closed systems for circulating hazardous materials. GEC will review and comment on specifications and inspect closed systems prior to acceptance. Final compliance noted by ECM review and acceptance of RTD approval closed systems.
HMW04	4.12.3	The operation and maintenance of a fixed guideway transit system will require the use of some hazardous materials and may generate hazardous waste.	Train employees in the safe use and management of hazardous materials, as described in the Construction Health and Safety Plan.	Segment I WOFH Contract	CORE Systems design-build-operator	Operation	Document the completion of appropriate employee training and perform field monitoring to ensure that the safe use and management practices taught during the training are implemented.	GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare transit operation hazardous material safety plan and perform monitoring during operation of the first phase of the Project, document that training has been done Final compliance noted by ECM review and acceptance of training records.
HMW05	4.12.3	The operation and maintenance of a fixed guideway transit system will require the use of some hazardous materials and may generate hazardous waste.	Institute waste minimization programs to limit the volume and type of materials used and resulting wastes, as described in the Solid Waste Management Plan.	Segment I WOFH Contract	CORE Systems design-build-operator	Operation	Compliance checked by separate, focused review and documentation in Solid Waste Management Plan.	GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare transit operation waste minimization plan and perform monitoring during operation of the first phase of the Project. Waste minimization training will be included in the project operation plan. Final compliance noted by ECM review and acceptance of training records.
HMW06	4.12.3	The operation and maintenance of a fixed guideway transit system will require the use of some hazardous materials and may generate hazardous waste.	Provide appropriate waste storage locations and receptacles, as defined in the Construction Health and Safety and Solid Waste Management Plans.	Segment I WOFH Contract	CORE Systems design-build-operator	Operation	Review the Solid Waste Management Plans and have field monitors check compliance with these plans at the site.	GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare transit operation hazardous material safety plan and perform monitoring during operation of the first phase of the Project. Hazardous material training will be included in the project operation plan. Final compliance noted by ECM review and acceptance of training records.

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HMW07	4.12.3	The operation and maintenance of a fixed guideway transit system will require the use of some hazardous materials and may generate hazardous waste.	Periodically evaluate wastes to establish whether they are hazardous, as described in the Construction Health and Safety and Solid Waste Management Plans.	Segment I WOFH Contract	CORE Systems design-build-operator	Operation	GEC field monitors will determine a timetable to evaluate wastes to establish whether they are hazardous. Using this timetable, they will evaluate the waste and report their findings.	GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare transit operation hazardous material safety plan and perform monitoring during operation of the first phase of the Project. Hazardous material training will be included in the project operation plan. Final compliance noted by ECM review and acceptance of training records.
HMW08	4.12.3	Hazardous materials and waste impacts to communities and neighborhoods.	Recycle wastes to the maximum extent practicable, as described in the Solid Waste Management Plan.	Project-wide	CORE Systems design-build-operator and guideway contractors	Operation	GEC field monitors will follow the solid waste management plan and evaluate the amount of wastes that are recycled and determine if it is possible to further recycle non-recycled wastes. See design and contractor specific ECPs and Sustainability Plans.	GEC ECM	CORE Systems design-build-operate-maintain contractor will prepare transit operation waste minimization plan and perform monitoring during operation of the first phase of the Project. Waste minimization training will be included in the project operation plan. Final compliance noted by ECM review and acceptance of training records.
HMW09	4.18.2 4.18.7 4.18.8	Hazardous materials and waste impacts to communities and neighborhoods.	The contractor will prepare the following plans to mitigate construction impacts related to wastes and their potential impact to communities and neighborhoods: Construction Safety and Security Plan; Construction Health and Safety Plan; Construction Contaminant Management Plan; Construction Contingency Plan; and Solid Waste Management Plan	Project-wide	Guideway contractor and station contractor	Construction	Plans prepared by the contractor will be reviewed and documented by the GEC ECM.	GEC CRE GEC ECM	Compliance noted on final construction plans (all of the five listed in the Mitigation Measure) and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.
Water Resources									
W01	4.14.3	The Project and associated features will have guideway support columns, station piers, and roadway bridge piers below the Ordinary High Water Mark (OHWM) in five rivers and streams along the project corridor.	Mitigation for impacts on water will be conducted at the Waiawa Stream mitigation site and includes the following: enhancement of the stream to restore and/or improve ecological and aquatic function; establishment of water quality basins; enhancement of floodway capacity conveyance to achieve zero rise in flood zone by removal of fill and an increase in stream area; extension of existing culvert to Waiawa Stream to correct existing ponding situation; ecological restoration with native Hawaiian plantings and use of non-invasive species. Details will be developed during the permitting phase.	Segment II Kamehameha Contract	RTD is responsible for mitigation site for impacts to waters of the U.S. Site grading and landscape design will be done by the final designer and contractor for the station.	Design and construction	Verify the process used by the designers to incorporate environmental commitments into the design through review of designer procedures. Verify restoration through review of construction monitoring reports.	GEC CRE GEC ECM	Compliance noted on final design plans and signed off by GEC DM and CRE as needed. Final compliance noted by ECM review and acceptance of construction closeout report.

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Cultural Resources/Section 4(F)									
CR01	Appendix I	Construction and operation of the elevated guideway and stations will have adverse effects on historic and archaeological resources along the project corridor.	<p>The Programmatic Agreement (PA) provides for mitigation of adverse effects to historic properties and also outlines procedures to be followed to protect historic properties, including archaeological resources and native Hawaiian burials, as construction proceeds. The PA includes stipulations that describe the roles and responsibilities of the parties, which includes Federal Transit Administration (FTA), State Historic Preservation Officer (SHPO), Advisory Council on Historic Preservation (ACHP), and the City and County of Honolulu. Stipulations are as follows:</p> <ul style="list-style-type: none">• Committing to complete Traditional Cultural Property (TCP) studies• A phased approach to undertaking archaeological studies that includes initial planning, consultation, fieldwork, developing treatment and mitigation plans, and curation• Following established design standards• Recording and documenting adversely affected built resources• Completing National Register of Historic Places (NRHP) and National Historic Landmark (NHL) nominations• Funding and administering educational and interpretive programs, materials, and signage• Mitigating adverse effects to specific resources by funding and supporting preservation and restoration efforts• Implementing measures to address reasonably foreseeable indirect and cumulative effects caused by the Project <p>The PA also describes how post-review discoveries will be handled and commits to providing public information throughout the term of the PA.</p>	Project-wide	City	The timing of stipulations listed in the PA are estimated based on beginning design and construction of the first construction phase and FTA granting approval to enter Final Design in 2011 and FTA signing a Full-Funding Grant Agreement in 2011. The Project is anticipated to be completed in four construction segments: 1: East Kapolei to Pearl Highlands, 2: Pearl Highlands to Aloha Stadium, 3: Aloha Stadium to Middle Street, and 4: Middle Street to Ala Moana Center. Segment 1 will be built as a design-build project beginning in 2011. Segment 2 is anticipated to begin construction in 2011, Segment 3 in 2013, and Segment4 in 2014. Construction is anticipated to be complete in 2019.	City will provide progress statements to FTA, State Historic Preservation Division (SHPD), and consulting parties through semi-annual reports, including how commitments made in the PA have been met and how enforcement is accomplished.	City will monitor implementation in cooperation with FTA and SHPD. ACHP will provide oversight and advise on disputes.	Documentation that all terms and conditions of the PA have been adhered to and have been included in the plans and specifications. Construction inspection reports showing construction contractor compliance with plans and specifications that included the terms and conditions of the Programmatic Agreement.

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CR02	Appendix I	Construction and operation of the elevated guideway and stations will have adverse effects on historic and archaeological resources along the project corridor.	The PA pertaining to archaeological resources has been developed in consultation with SHPO, ACHP, FTA, the City, and other Section 106 consulting parties to address the identification and treatment of traditional cultural properties, the identification and protection of archaeological sites and burials, and the identification and treatment of historic buildings and structures within the Project's Area of Potential Effect (APE).	Project-wide	City	The timing of activities listed in the PA are estimated based on beginning design and construction of the first construction phase and FTA granting approval to enter Final Design in 2011 and FTA signing a Full-Funding Grant Agreement in 2011. The Project is anticipated to be completed in four construction segments: 1: East Kapolei to Pearl Highlands, 2: Pearl Highlands to Aloha Stadium, 3: Aloha Stadium to Middle Street, and 4: Middle Street to Ala Moana Center. Segment 1 will be built as a design-build project beginning in 2011. Segment 2 is anticipated to begin construction in 2011, Segment 3 in 2013 and Segment 4 in 2014. Construction is anticipated to be complete in 2019. Specific to identification and protection of archaeological sites and burials and AIS Plan for the APE for each construction phase to the SHPD.	The City shall develop an archaeological resources monitoring plan specifying the locations within the construction area that require a monitor and describing the level of monitoring necessary. The monitoring plan will be developed and implemented by a qualified archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology, 48 Fed. Reg. 44738-9 (Sept. 29, 1983). <i>Reference the Programmatic Agreement Monitoring Plan.</i>	City's Kako'o will monitor implementation in cooperation with FTA, SHPD, and OIBC. ACHP will provide oversight and advise on disputes. SHPO and OIBC will have jurisdiction to determine the treatment of previously identified Native Hawaiian burial sites pursuant to HAR, Title 13, Subtitle 13, and Chapter 300.	Documentation that all terms and conditions of the PA have been adhered to and have been included in the plans and specifications as appropriate. Treatment Plans will guide construction contractor compliance with plans and specifications that are included in the terms and conditions of the PA.
CR03	Appendix I	Construction and operation of the elevated guideway and stations will have adverse effects on historic and archaeological resources along the project corridor.	Prior to construction, an archaeological inventory survey plan will be developed for each construction phase in coordination with the O'ahu Island Burial Council and SHPO. The sampling will be completed in advance of Final Design completion so that the presence of any sensitive archaeological sites/burials discovered during fieldwork can be addressed during Final Design.	Project-wide	City	Design and pre-construction	Archeological Inventory Survey (AIS), see Appendix B	GEC ECM	Documentation that all terms and conditions of the PA have been adhered to and have been included in the plans and specifications. Construction inspection reports showing construction contractor compliance with plans and specifications that included the terms and conditions of the PA.

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Permits									
PM01	4.21 Table 4-40 3.5.1	Permits in and of themselves are not impacts but reflect the need for agency coordination and pre-authorization due to the nature of construction activities.	Table 4-40 of the Final EIS summarizes permits, certificates, and/or approvals anticipated to be required for implementation of the Project. When it states that permits, approvals, and agreements are required, it is anticipated that they will be received prior to commencing the activity that triggers the permit, approval, or agreement. The City will be responsible for obtaining all permits, approvals, and agreements unless otherwise noted. The City will ensure that all permit, approval, and agreement conditions are met.	Project-wide	GEC/RTD	Design and construction; refer to Table 4-40 prior to construction	Apply for permits and obtain agency approvals. Permit conditions incorporated into the Project-wide Environmental Compliance Plan. Compliance with permit conditions monitored during construction. Construction inspection reports showing construction contractor compliance with plans and specifications that included the permit conditions.	GEC ECM	Permits granted. Interim compliance is noted by GEC ECM as design plans are accepted by GEC DM and CRE. Compliance with permit conditions monitored during construction. Final compliance noted by ECM review and acceptance of construction closeout report.
PM02	3.4.3	Impact to freeway airspace by entering or crossing mainline or access ramps.	There are six locations where the Project will either cross or enter interstate freeway airspace, including freeway mainline and access ramps. The City will coordinate with FHWA to obtain the necessary permits and approvals related to airspace.	Segment III Airport Contract	GEC/RTD	Design	Apply for permit and obtain agency approvals. Permit conditions incorporated into the Environmental Compliance Plan. Compliance with permit conditions monitored during construction Documentation of compliance with FHWA regulations and requirements related to airspace through correspondence and reporting to FHWA. Construction inspection reports showing construction contractor compliance with plans and specifications that included the permit conditions.	GEC CRE	Permits granted. Interim compliance is noted on by GEC ECM as design plans are accepted by GEC DM and CRE. .Compliance with permit conditions monitored during construction. Final compliance noted by ECM review and acceptance of construction closeout report. DM and CRE as needed.
PM03	4.14.3	Construction within Waters of the U.S.	The City and County will obtain USACE permits for all phases of construction as presented in the Final EIS.	Segment IV City Center Contract	GEC/RTD	Design and construction	Apply for permit, CWA Section 404— Department of the Army Permit, various nationwide permits, and/or Section 10 of the Rivers and Harbors Act.	GEC ECM	Permits granted. Permit conditions incorporated into the Environmental Compliance Plan. Compliance with permit conditions monitored during construction. Construction inspection reports showing construction contractor compliance with plans and specifications that included the permit conditions.
Traffic Management									
TM01	3.4.3 3.4.7	Additional merging traffic on H-2 northbound on-ramp.	To mitigate for additional merging traffic on the H-2 northbound on-ramp at Kamehameha Highway, the City will restripe the section of H-2 near the ramp merge area to provide a parallel merge lane that will continue for approximately 500 feet across an existing bridge.	Segment II Kamehameha Contract	Guideway designer and contractor	Design and pre-construction with implementation of MOT	Review design plans for the restriping and ensure restriping occurs before increased traffic at merge occurs.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.

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TM02	3.4.7	Widening of existing roadway to accommodate the Project and or traffic changes due to the Project.	North-South Road and East-West Connector Road (East Kapolei Station): widening the northbound (or mauka-bound) direction of North-South Road to provide dual left-turn lanes, three through lanes, and one right-turn lane. The length of the dual left-turn lanes is a minimum of 210 feet.	Segment I WOFH Contract	Guideway designer and contractor	Design	Review design plans against checklist for mitigation measures.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.
TM03	3.4.7	Widening of existing roadway to accommodate the Project and or traffic changes due to the Project.	North-South Road and Future Road B (UH West O'ahu Station): widening the westbound (or Koko Head-bound) direction of Road B to provide two left-turn lanes, one through lane, and one right-turn lane. The length of the dual left-turn lanes is a minimum of 240 feet.	Segment I WOFH Contract	Guideway designer and contractor	Design	Review design plans against checklist for mitigation measures.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.
TM04	3.4.7	Widening of existing roadway to accommodate the Project and or traffic changes due to the Project.	Kamehameha Highway at Waihona Street (Pearl Highlands Station entrance): widening the north leg (southbound approach) of the Kamehameha Highway at Waihona Street intersection to have a separate right-turn, and a combined through and left-turn lane (total of two southbound lanes into the intersection).	Segment I WOFH Pearl Highlands Station and Garage	Guideway designer and contractor	Design	Review design plans against checklist for mitigation measures.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.
TM05	3.4.7	Change of existing traffic signals to accommodate the Project and or traffic changes due to the Project.	Farrington Highway and Waiawa Road/Pearl Highlands Station park-and-ride driveway (Pearl Highlands Station): installation of a new traffic signal that will be coordinated with adjacent signals at the Farrington Highway eastbound and Waiawa Road intersection.	Segment I WOFH Pearl Highlands Station and Garage	Guideway designer and contractor	Design	Review design plans against checklist for mitigation measures.	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.
TM06	3.4.7	Change/addition of existing traffic signals to accommodate the Project and or traffic changes due to the Project.	Kamehameha Highway and Kuala Street (Pearl Highlands Station): signalizing the 'Ewa-bound Kamehameha Highway at Kuala Street and widening Koko Head-bound Kamehameha Highway from one to two lanes.	Segment I WOFH Pearl Highlands Station and Garage	Guideway designer and contractor	Design	Review signal design plans for mitigation measure	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.
TM07	3.4.7	Change/addition of existing traffic signals to accommodate the Project and or traffic changes due to the Project.	Kona Street and Ke'eaumoku Street (Ala Moana Center Station): signalizing this intersection will reduce the delay at this location. Because of the proximity of this intersection to the signalized intersection at Kapi'olani Boulevard and Ke'eaumoku Street, the signals will be coordinated to enhance traffic flows and prevent additional effects at other locations.	Segment IV City Center Contract	Guideway designer and contractor	Design	Review signal design plans for mitigation measure	GEC CRE GEC ECM	Compliance noted on Final Design plans and signed off by GEC CRE. Final compliance noted by ECM review and acceptance of construction closeout report.

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TM08	3.4.7	MOT for major events at Aloha Stadium.	To minimize the effect on traffic and ensure safety during major events at Aloha Stadium, the City will coordinate with the Stadium Authority to provide staff and/or resources as needed to help manage the flow of pedestrians walking between Aloha Stadium and the station entrance.	Segment II Kamehameha Contract Aloha Stadium	Station designer and contractor	Operation	Develop a process by which Stadium Authority and the City communicate and coordinate major events.	GEC ECM	GEC/RTD prepare transit operation Maintenance of Traffic (MOT) and pedestrian management plan and perform monitoring during operation of the first phase of Segment IV of the Project during major events at Aloha Stadium. MOT and pedestrian management plan will be included in the project operation plan. GEC ECM will note compliance by reviewing documenting compliance checked by the RTD SSM.
Construction Effects									
C01TM	3.5.7 8.6.10	Traffic impacts during construction of elevated rail.	A Maintenance of Traffic (MOT) Plan and a Transit Mitigation Program (TMP) will be developed in conjunction with the Project's Final Design by the contractor. The MOT will include site-specific traffic-control measures. The contractor will be given parameters, such as the number of lanes that could be closed and the procedures for closures, and will develop the MOT Plan accordingly with approval from the City or HDOT. A detailed schedule showing which lanes will be affected will be prepared for the construction of elevated segments. The actual means for erecting these segments will be the contractor's decision. Both the MOT and TMP will be shared with the public.	Project-wide	All designers and Contractor's EMC	During Final Design and prior to construction	GEC ECM will review the contractors' procedures for compliance with the ECP and work plans. The GEC ECM will review and comment on work plans as necessary, prior to commencement of any major design or construction activity. GEC will conduct field review to document that the mitigation measures prescribed in the MOT and TMP have been put in place and executed.	GEC ECM	City/HDOT approve the MOT and TMP, which are shared with the public. MOT and TMP become part of construction contract documents. Construction inspection reports show construction contractor compliance with construction contract documents that included the mitigation measures. ECM will note compliance by reviewing documenting compliance checked by the City and HDOT.
C02TM	3.5.7	Traffic impacts near work areas.	Work Zone Traffic Control Plans, including detour plans, will be formulated during Final Design in cooperation with the City, HDOT, and other affected jurisdictions.	Project-wide	All designers and Contractor's ECM	Prior to construction	Field review to document that the mitigation measures prescribed in the traffic control plan have been put in place and executed.	GEC ECM	City/HDOT approve the plan and affected jurisdictions are notified. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.

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C03ENV	4.18	Environmental impacts for all resources will occur during construction.	The City will ensure that the environmental commitments in the Final EIS and the permit conditions are met during Final Design and construction of the Project. The City will employ a dedicated environmental compliance manager ((the GEC ECM)to oversee construction contractor compliance with all stormwater BMPs, construction noise mitigation measures, utility coordination, business access requirements, and any mitigation plans prepared for the Project, including those presented in permit conditions and the MOT Plan.	Project-wide	GEC/RTD	Design and construction	Field review to document that the mitigation measures prescribed in the Final EIS and permit conditions have been put in place and executed.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.
C04CF	4.18.2 8.6.10	Change in business access (temporary during construction).	Access to businesses in the project area will be maintained throughout construction as practicable; however, there could be temporary changes to access and traffic movement during construction.	Project-wide	-Contractor's ECM	Prior to construction	Field review to document that access to businesses has been maintained or accommodations for temporary changes to access and traffic movement have been implemented. Draft Construction Transportation Management Plan, Page 3: "Local access to driveways will be maintained. For curb-lane closures, local access will be provided to adjacent businesses."	GEC ECM	Businesses are notified in advance of possible changes in access, and disruptions are minimized. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.
C05CF	4.18.2	Interruption of utility service.	Utility service to abutting properties may be temporarily interrupted for short periods. Property owners will be contacted prior to interruption of utility services. If facilities are temporarily relocated, the area will be restored as close as possible to its original condition. Replacements for existing utilities will provide service companies capacity equal to that currently offered. Coordination will occur with emergency services and utility companies to ensure that utility relocations meet their needs and that sufficient clearance is provided.	Project-wide	Contractor's ECM	Prior to construction	Field review to document that access has been maintained or accommodations for temporary changes to access and movement have been implemented. Document that notification has occurred.	GEC ECM	Property owners, administrators of affected schools, parklands, or recreational resources are notified in advance of possible changes in access and disruptions are minimized. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.
C06CF	4.18.2	Interruption of utility service.	Utility service to abutting properties may be temporarily interrupted for short periods. Property owners will be contacted prior to interruption of utility services. If facilities are temporarily relocated, the area will be restored as close as possible to its original condition. Replacements for existing utilities will provide service companies capacity equal to that currently offered. Coordination will occur with emergency services and utility companies to ensure that utility relocations meet their needs and that sufficient clearance is provided.	Project-wide	Contractor's ECM	One month and again one week and again one day prior to construction activities that will interrupt utility service	Document that property owners have been contacted prior to interruption of utility services and if facilities are temporarily relocated; field review to confirm that the area has been restored as close as possible to its original condition; document that coordination with emergency services and utility companies has occurred.	GEC ECM	Property owners are notified in advance of possible service disruptions and the potential disruptions are minimized. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.

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C07V	4.18.3	Visual impacts during construction.	<p>The contractor will incorporate construction management practices as practical to minimize visual impacts during construction, including the following:</p> <ul style="list-style-type: none"> • Remove visibly obtrusive erosion-control devices, such as silt fences, plastic ground cover, and straw bales, as soon as an area is stabilized • Locate stockpile areas in less visibly sensitive areas whenever possible so they are not visible from the road or to residents and businesses • Shield temporary lighting and direct it downward to the extent possible • Limit the times construction lighting can be used in residential areas • Replace removed street trees and other vegetation with appropriately sized vegetation as soon as practical after construction is completed in the same location or another location in accordance with City and State requirements 	Project-wide	Contractor's ECM	Prior to construction	Document that the construction management practices listed in the Mitigation Measure have been implemented.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.
C08AQ	4.18.4	Dust impacts during construction.	<p>The contractor will select appropriate measures to comply with fugitive dust requirements. The following control measures can substantially reduce fugitive dust:</p> <ul style="list-style-type: none"> • Minimize land disturbance • Use watering trucks to moisten disturbed soil • Use low emission equipment when feasible • Cover loads when hauling dirt • Cover soil stockpiles if exposed for long periods • Use windbreaks to prevent accidental dust pollution • Limit the number of vehicular paths and stabilize temporary roads • Maintain stabilized construction area ingress/egress areas • Wash or clean trucks prior to leaving construction sites • Minimize unnecessary vehicular activities 	Project-wide	Contractor's ECM	Prior to construction	Field review to document that the measures (listed in the Mitigation Measure) to reduce fugitive dust have been implemented.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.
C09W	4.18.10	Construction work in waters and streams.	Columns, foundations, diversions, and other temporary and permanent structures will be placed in or on the banks of Kalo'i Gulch, Waiawa Stream, Waiawa Springs, Moanalua Stream, Kapālama Canal Stream, and Nu'uano Stream. Work in these waters is highly regulated and will require permits from Federal and State agencies. Through the permitting process, details of BMPs will be developed to mitigate potential impacts to streams due to placement of fill.	Segment I WOFH and Segment II Kamehameha Contracts	GEC/RTD	During Final Design and prior to construction	Document that BMPs to mitigate potential impacts to streams are included in construction plans and specifications and that they have been implemented.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the permit conditions for working within regulated waters. Final compliance noted by ECM review and acceptance of construction closeout report.

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C010W	4.18.10	Potential impacts to wetlands adjacent to construction work areas.	The contractor will be prohibited from entering any wetlands during construction. The wetlands will be designated as a no-work area on the Final Design plan sheets and 3-foot-high orange fencing will be installed around the wetland to designate the no-work area. The orange fencing will be inspected routinely to ensure that it is maintained.	Project-wide	Contractor's ECM	Construction	Field review to document that orange fencing around wetlands has been installed. Inspect routinely to ensure that it is maintained.	GEC ECM	Confirm that wetlands are designated as a no-work area on the Final Design plan sheets. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.
C011W	4.18.10	Differential settlement may impact adjacent buildings, other structures (such as bridges and sidewalks), and utilities.	Excessive or differential settlement due to drilled shaft dewatering and the resultant depression of the groundwater surface can cause cracking and other damage to structures. Settlement is expected to be minimal because the level of the groundwater depression is expected to be localized and generally not greater than about 5 feet below static groundwater levels. Where dewatering produces a drawdown in excess of 5 feet, construction monitoring will be required to monitor for dewatering-induced settlement.	Project-wide	Contractor's ECM	During construction	Inspect all drilled shafts for drawdown and observe for settlement activities. Notify GEC ECM of any drawdown greater than 5 feet, excessive ground settlements, or cracking and other damage to structures that may be related to dewatering.	GEC ECM	City and HDOT review and comment on the plans and specifications related to geotechnical stability. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures for geotechnical stability. Final compliance noted by ECM review and acceptance of construction closeout report.
C012W	4.18.10	Drilling fluids could impact soils and water resources.	Uncontrolled releases of drilling fluids are not permitted. The displaced fluid will be collected and treated as necessary for either reuse or disposal in accordance with permit requirements.	Project-wide	Contractor's ECM	Construction	Inspect drilling locations and observe handling of drilling fluids; maintain record of all fluid disposals.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures for handling and disposing of drilling fluids. Final compliance noted by ECM review and acceptance of construction closeout report.

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C013W	4.18.10	Stormwater runoff may contaminate water resources during construction.	Stormwater BMPs may include, but not be limited to, the following: <ul style="list-style-type: none"> Minimize land disturbance Stabilize or cover the surface of soil piles Revegetate all cleaned and grubbed areas to the extent possible Maintain stabilized construction area ingress/egress areas Wash or clean trucks prior to leaving the construction site Install silt fences and storm drain inlet filters Prevent off-site stormwater from entering the construction site Implement other stormwater management techniques 	Project-wide	Contractor's ECM	Construction	Document that BMPs are included in construction plans and specifications and that they have been implemented.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the NPDES Stormwater Discharge permit conditions. Final compliance noted by ECM review and acceptance of construction closeout report.
C014P	3.4.7 3.5.7	Passenger loading and freight loading zones may be displaced during construction.	Passenger loading zones on Halekauwila Street near South Street and on Halekauwila Street near Kamani Street and a freight loading zone on Ka'aahi Street will be temporarily relocated near each location for the duration of construction.	Segment IV City Center Contract	Contractor's ECM	Prior to construction	Inspect passenger loading zones after they have been relocated and before construction begins.	GEC ECM	Documentation that temporary changes to loading zones have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measure. Final compliance noted by ECM review and acceptance of construction closeout report.

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C015TS	3.5.2 3.5.7	Impacts to existing TheBus and TheHandi-Van service.	<p>The Transit Mitigation Program (TMP) will define adjustments that will mitigate the effects of construction on existing TheBus and TheHandi-Van service and will be customized for each construction phase and sized to properly serve projected rider demands. The TMP will generally maintain existing bus routes and stops. Identification of potential changes to bus routes and stops will be coordinated with TheBus. In areas where interruptions are expected, the following approaches may be adopted:</p> <ul style="list-style-type: none"> • Relocating bus stops • Rerouting existing service for short sections where no additional buses are required • Rerouting existing service for longer segments that require additional buses • Introducing new services if they operate on different alignments not affected as heavily by construction • Ceasing operation of routes or portions of routes temporarily and redeploying service hours to parallel routes • Initiating a public information program to inform transit riders of service changes during construction • Rerouting school bus routes that will be substantially delayed 	Project-wide	GEC/RTD	During Final Design and prior to construction	Field review to document that the mitigation measures prescribed in the TMP (see Mitigation Measure column) have been put in place and executed. Ongoing coordination with TheBus and TheHandi-Van service providers.	GEC ECM	City approves the TMP. Construction inspection reports show construction contractor compliance with plans and specifications that included the TMP mitigation measure. Final compliance noted by ECM review and acceptance of construction closeout report.
C016TS	3.5.2 3.5.7	Changes to bus transit service during construction.	The phased opening approach will require interim changes to bus transit service. A plan to accommodate the use of phased openings will be developed in advance. Identification of potential changes to bus routes, stops, and service resulting from construction of the Project will be coordinated with TheBus.	Project-wide	GEC/RTD	Prior to opening or operation of each phase	The plan is implemented prior to each opening.	GEC ECM	GEC/RTD prepare transit operation bus coordination plan and perform monitoring during operation of the first phase of each segment of the Project. Phased openings and coordination with TheBus will be included in the project operation plan. Final compliance noted by ECM review and acceptance of construction closeout report.
C017TM	3.5.3	Changes to traffic signals adjacent to fixed guideway during construction (temporary and permanent).	Traffic signals adjacent to the fixed guideway could be temporarily replaced or re-timed. In addition, temporary traffic signals may be placed at some unsignalized intersections during construction.	Project-wide	Contractor's ECM	Construction	Review traffic operations for deficiencies.	GEC ECM	City and HDOT review and comment on the traffic control plan and affected jurisdictions are notified. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures of the traffic control plan. Final compliance noted by ECM review and acceptance of construction closeout report.

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C018P	3.5.4 3.5.7	Loss of available parking during construction.	<p>On-street parking by construction workers will not be permitted near work sites. During the actual hours of work, only those vehicles absolutely necessary for construction shall be allowed within the safety zone or allowed to stop or park on the shoulder of the roadway with the approval from the City.</p> <p>Signs will be posted directing people to nearby locations with available parking. The public will be kept aware of upcoming work locations, and information will be available on the project website about parking disruptions and alternatives.</p> <p>Construction workers also will not use commercial parking facilities if doing so reduces available parking for customers or employees of that business. Contractors will need approval from business owners before private lots can be used for parking.</p> <p>The City will coordinate with property owners regarding the timing of construction and other issues to minimize disruption to off-street parking.</p>	Project-wide	Contractor's ECM	Construction	Field review to document that the mitigation measure has been implemented.	GEC ECM	Documentation that the temporary changes to on-street and off-street parking have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measure. Final compliance noted by ECM review and acceptance of construction closeout report.
C019TM	3.5.5 3.5.7	Temporary changes to pedestrian and bicycle facilities during construction.	<p>Access to existing bicycle and pedestrian facilities will be maintained during all phases of construction as safety allows.</p> <p>Warning and/or notification signs will be provided. Proposed pedestrian detours will be submitted to the City for review and approval to ensure they are reasonable for all pedestrians and meet ADA regulations.</p> <p>Proper deterrents, such as barriers or fencing, will be placed to prevent access through the construction area. Pedestrian flow will be channelized in areas where sidewalks are near construction.</p> <p>Alternative routes will be provided to avoid hazardous areas.</p>	Project-wide	Contractor's ECM	Construction	Field review to document that the mitigation measure has been implemented.	GEC ECM	City and HDOT review and comment on the pedestrian circulation and control plan, and affected jurisdictions are notified. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures of the pedestrian circulation and control plan. Final compliance noted by ECM review and acceptance of construction closeout report.
C020TM	3.5.7	Traffic impacts during construction.	ITS applications will be implemented to make travel through and around work zones safer and more efficient. Several ITS strategies will be used, including traveler information, arterial traffic management, and incident management.	Project-wide	GEC/RTD	Design prior to construction and implement ITS during construction	Document that the ITS applications have been implemented.	GEC ECM	City and HDOT review and comment on the traffic control plan, and affected jurisdictions are notified. Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures of the traffic control plan. Final compliance noted by ECM review and acceptance of construction closeout report.

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C021TS	3.5.7	Station opening effects on traffic movement and efficient traffic flow.	As each station opens, temporary signage will be installed that provides driving directions to available parking (if provided) and to passenger drop-off and pick-up locations. Signage will also direct pedestrians and bicyclists to station entrances.	Project-wide	GEC/RTD	Prior to opening/operation of stations	Field review and documentation that signage has been installed.	GEC ECM	GEC/RTD prepare transit operation bus coordination plan and perform monitoring during operation of the first phase of each segment of the Project. Phased openings and coordination with TheBus will be included in the project operation plan. Final compliance noted by ECM review and acceptance of construction closeout report.
C022NV	4.18.5	Vibration effects on adjacent buildings due to construction.	For buildings closer than 75 feet to pile-driving activities, the contractor will be required to provide mitigation for vibration levels during these activities. Contractors will be required to perform a video survey of the immediate area prior to the start of any construction activity where vibration levels may be high enough to affect surrounding structures.	Project-wide	GEC/RTD Contractor's ECM	Prior to and during construction	Review of contractor mitigation plan; on-site monitoring during pile driving activities.	GEC ECM	Construction inspection reports show construction contractor compliance with noise and vibration monitoring plans and specifications that included the mitigation measures. Final compliance noted by ECM review and acceptance of construction closeout report.
C023NV	4.18.5	Construction noise on nearby sensitive receptors.	Prior to construction, an approved Community Noise Variance will be obtained from HDOH for the Project. Noise permits will be obtained prior to the construction of each phase of the Project. The permits will regulate construction times and activities and include mitigation commitments.	Project-wide	GEC/RTD	Prior to construction	Review and approval of the noise variance by HDOH.	GEC ECM	Construction times and activities are regulated and construction noise managed in conformance with the noise variance. Construction inspection reports show construction contractor compliance with requirements of Community Noise Variance and noise permits. Final compliance noted by ECM review and acceptance of construction closeout report.
C024NR	4.18.8	Clearing and grubbing activities near ko'oloa'ula reserve could impact threatened and endangered plant species.	Prior to clearing and grubbing near the ko'oloa'ula contingency reserve, the area will be surveyed. If any ko'oloa'ula are found, a horticulturist approved by DLNR will be given an opportunity to remove the plants and transplant them to the contingency reserve.	Segment I WOFH Contract	GEC/RTD	Prior to clearing and grubbing or construction activities	Survey the ko'oloa'ula contingency reserve for ko'oloa'ula.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures related to ko'oloa'ula. Final compliance noted by ECM review and acceptance of construction closeout report.

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C025NR	4.18.8 7.3.1	Pruning activities of large canopy trees near potential white tern habitat.	The City will survey all large canopy trees to be pruned prior to construction to ensure that no trees have white tern chicks. If any are found, pruning will be delayed until chicks fledge.	Project-wide and specific area between Middle Street and UH Mānoa	GEC/RTD	Prior to construction	Survey all large canopy trees for the presence of white tern chicks.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures related to large canopy trees. Final compliance noted by ECM review and acceptance of construction closeout report.
C026IS	4.18.9	Invasive species impacts during construction.	<p>Construction equipment or material imported to O'ahu from the mainland, neighbor islands, or foreign countries must be free of dirt, vegetative matter, and animals.</p> <p>Construction equipment will be cleaned and inspected before being brought to the project site.</p> <p>On-site workers will be trained to recognize common invasive species growing in the construction area.</p> <p>Site surveys to assess the construction area for invasive species will be conducted before, during, and after construction.</p> <p>When fill is imported to or exported from the job site, care will be taken to avoid spreading invasive species, and location records will be kept.</p> <p>Criteria for cleaning, inspection, and treatment of plants that are at risk of harboring pests will be part of the landscaping requirements.</p> <p>Species that can be harmful invaders will not be used for project plantings.</p>	Project-wide	Contractor's ECM	Prior to construction	Document that the prescribed mitigation measures have been implemented.	GEC ECM	Construction inspection reports show construction contractor compliance with plans and specifications that included the mitigation measures related to invasive species control. Final compliance noted by ECM review and acceptance of construction closeout report.
C027CR	4.18.11 Appendix H	Construction could adversely affect subsurface archaeological resources.	Consultation with SHPD will assess the need for archaeological monitoring during construction. The archaeological monitoring program will follow the Programmatic Agreement. A monitoring report will be prepared to document all results at the completion of construction. In the vicinity of the Waipahu Transit Center, archaeological monitoring will include the recovery of data from the identified subsurface cultural deposit (Lo'i sediments).	Project-wide	Contractor's ECM	During construction	Follow monitoring program defined in the PA; prepare report as prescribed. Reference the Programmatic Agreement Monitoring Plan.	Architectural Historian GEC ECM	Documentation that all terms and conditions of the Programmatic Agreement have been adhered to and have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the terms and conditions of the Programmatic Agreement.

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C028CR	4.18.11 Appendix H	Construction could adversely affect subsurface archaeological resources.	In advance of construction, archaeological resources deemed worthy of preservation in place may be identified. If this occurs and the Project is modified to avoid such resources, construction activities will also avoid those resources. Protection zones will be established around these resources to avoid disturbance during construction, as described in the Section 106 Programmatic Agreement.	Project-wide	GEC/RTD Contractor's ECM	Prior to and during construction	Follow monitoring program defined in the PA (cross reference with CR-2). Reference the Programmatic Agreement Monitoring Plan.	Architectural Historian GEC ECM	Documentation that all terms and conditions of the Programmatic Agreement have been adhered to and have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the terms and conditions of the Programmatic Agreement.
C029CR	4.18.11 Appendix H	Construction could adversely affect subsurface archaeological resources, including human remains.	During archaeological sampling, burials will be identified and managed in compliance with applicable laws. This will include consulting with project proponents, the O'ahu Island Burial Council, SHPO, and recognized lineal and/or cultural descendants to develop burial treatment plans. Although the goal of the archaeological sampling will be to identify all burials and treat them appropriately prior to the start of construction in a particular area, the chance exists that additional previously undiscovered burials will be encountered during construction. In each geographic area, the parties consulted regarding burials during the Project's archaeological sampling phase will be consulted if a find is made during construction. The Programmatic Agreement outlines the treatment of burials discovered during preliminary archaeological work, prior to Final Design, as well as burials found during construction.	Project-wide	Contractor's ECM	During construction	Follow applicable laws and monitoring program defined in the PA (cross reference with CR-2). Reference the Programmatic Agreement Monitoring Plan.	Architectural Historian GEC ECM	Documentation that all terms and conditions of the Programmatic Agreement have been adhered to and have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the terms and conditions of the Programmatic Agreement.
C030CR	4.18.11 Appendix H	Short-term (construction) change in cultural resource access.	Adverse impacts related to cultural resources resulting from construction of the Project will likely be short-term and consist of affecting access to areas where cultural resources exist or cultural activities are practiced. The impact to cultural resources or areas will be mitigated using the same maintenance of access policies outlined for businesses and described in the Section 106 Programmatic Agreement.	Project-wide	Contractor's ECM	During construction	Field review to document that maintenance of access policies outlined for businesses and as described in the PA have been implemented. Reference the Programmatic Agreement Monitoring Plan.	Architectural Historian GEC ECM	Documentation that all terms and conditions of the Programmatic Agreement have been adhered to and have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the terms and conditions of the Programmatic Agreement.

Mitigation ID	Final EIS Section(s)	Impact (Final EIS)	Mitigation Measure (Final EIS)	Project-wide (in all contracts) or Contract-specific (if contract-specific which contract)	Responsible Party for Implementing Mitigation	Timing of Mitigation Measure (Design, Construction, Operation)	Monitoring Action	Responsible Party for Monitoring Mitigation	Criteria for Completing Mitigation
C031CR	4.18.11 Appendix H	Historic resources could be inadvertently affected during construction.	Historic resources could be inadvertently affected during construction. Any potential construction impacts will be mitigated using measures outlined in previous construction sections related to noise, vibration, air quality, and water quality and as described in the Programmatic Agreement. In addition, to avoid collision with or damage to historic resources during construction, protection zones will be established around such resources to avoid disturbance during construction.	Project-wide	Contractor's ECM	During construction	Field review to document that protection zones established around resources avoid disturbance during construction activities (cross reference with CR-1). Reference the Programmatic Agreement Monitoring Plan.	Architectural Historian GEC ECM	Documentation that all terms and conditions of the Programmatic Agreement have been adhered to and have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the terms and conditions of the Programmatic Agreement.
C032NV	Appendix H	Noise and vibration construction impacts.	According to the Programmatic Agreement, during Final Design, the City, in cooperation with its contractors and FTA, will develop a Construction Mitigation Plan (CMP). The CMP will include a Noise and Vibration Mitigation Plan using any and all of the mitigation measures defined in the Final EIS and the FTA Noise and Vibration Impact Assessment (2006) guidance. Numeric limits and monitoring measures will be developed to minimize noise and vibration impacts. Vibration criteria included in Table 12-3 of the FTA guidance (FTA 2006) will be applied. Note that most historic properties in the corridor are non-engineered timber or masonry; a criterion of 0.2 inches per second of peak velocity would be applicable to these structures. Noise and vibration mitigation strategies will be included in the Construction Noise and Mitigation Plan.	Project-wide	GEC/RTD Contractor's ECM	During Final Design, prior to construction, and during construction	CMP is developed by the City in corporation with its contractors and FTA. Reference the Programmatic Agreement Monitoring Plan.	Architectural Historian GEC ECM	CMP is approved by FTA. Documentation that all terms and conditions of the Programmatic Agreement have been adhered to and have been included in the plans and specifications. Construction inspection reports show construction contractor compliance with plans and specifications that included the terms and conditions of the Programmatic Agreement.

Note: This is a summary of the mitigation measure commitments described in the Final EIS and ROD and does not represent the complete description of these commitments. This summary should not be used as the sole source of information and should be used along with the Final EIS, ROD or other contract documents.

Appendix B
Mitigation Monitoring Plan (MMP PA) for
Oversight of Section 106 Programmatic Agreement

Honolulu High-Capacity Transit Corridor Project

November 5, 2010

Prepared for:
City and County of Honolulu

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA Stipulation I: Roles and Responsibilities					
PA01	<p>1) The City shall provide for an architectural historian who meets the qualifications described in Stipulation I.E on the Project staff through the completion of Project construction.</p> <p>2) Programmatic Agreement (PA) Project Manager (Kako'o)</p> <p>The City shall fund a Kako'o within six (6) months of the PA being signed to assist with the coordination of all reviews and deliverables required under the terms of the PA.</p> <p>The Kako'o, and any other professionals serving with the Kako'o, shall meet the Secretary of the Interior's standards set forth at 36 C.F.R. Part 61 regarding qualifications for preservation professionals in the areas of history, archaeology, architectural history, architecture or historic architecture.</p> <p>3) Qualifications of Personnel—Unless otherwise specified, all work carried out under the terms of the PA shall be conducted and/or supervised by cultural resources professionals (historians, architectural historians, historic architects, and/or archeologists, as appropriate) who meet the Secretary of the Interior's Professional Qualification Standards set forth in Procedures for State, Tribal, and Local Government Historic Preservation Programs, 36 C.F.R. Part 61, Appendix A.</p> <p>4) The Kako'o shall serve during the design and construction process for the Project. The Kako'o shall continue to perform the Kako'o's responsibilities for the duration of this PA pursuant Stipulation XIV.D.</p> <p>The Kako'o's principal task shall be to monitor and assess and report to the consulting parties on compliance by the City with this PA, specifically, the implementation of the measures to resolve Adverse Effects stipulated herein.</p> <p>In this context and consistent with the independent monitoring, reporting and advisory role assigned to the Kako'o under the PA, the Kako'o shall perform the following responsibilities:</p>	FTA City and County of Honolulu (RTD PEM)	Team coordination on-going throughout design, construction and operation as required by the stipulations in the PA	PA01a—Hire staff to implement the PA that meet the following qualifications: All work carried out under the terms of the PA will be conducted and/or supervised by cultural resources professionals (historians, architectural historians, historic architects, and/or archeologists, as appropriate) who meet the Secretary of the Interior's Professional Qualification Standards set forth in Procedures for State, Tribal, and Local Government Historic Preservation Programs, 36 C.F.R. Part 61, Appendix A	Qualified staff and Kako'o hired by the City
			Fund and hire qualified professionals upon execution of the PA. Fund a Kako'o within six (6) months of the PA being signed to assist with the coordination of all reviews and deliverables required under the terms of the PA	PA01b—Provide FTA and SHPD the procurement request for the Kako'o prior to the release of such request, the qualifications of the final candidates under consideration by the City prior to the final selection of the Kako'o by the City, and the scope of work of the Kako'o to be included in the City's contract with the Kako'o, in order to ensure that the Kako'o duties and responsibilities are consistent with the provisions of the PA for review and approval. Upon making its selection of the Kako'o, the City shall provide written notification thereof to the FTA, SHPD and other signatory and consulting parties	

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
	<p>1. Establish and coordinate consultation and project status update meetings as stipulated in Stipulations III B and IX B. On an as needed basis, additional meetings may be held to address unforeseen effects to historic properties determined to be eligible within the APE as provided for in Appendix A.</p> <p>2. Establish and maintain lines of project-related communication and consultation with the consulting parties and the design and construction engineers, including oversight and monitoring of internet sites created for the Project.</p> <p>3. Monitor and assess and report, in writing, to the consulting parties on mitigation related to Phases I through IV and any associated deliverables of this PA that are to be reviewed by the consulting parties (Stipulations III through XII).</p> <p>4. Monitor and report on the City's compliance during the design and construction process for the Project with the special historic preservation design guidelines referred to in Stipulation IV.A, Design Standards.</p> <p>5. Monitor and report on work performed on historic properties with respect to measures to resolve Adverse Effects caused by the Project in accordance with Stipulations IX.C (Demolition Monitoring) and X.C (Construction Monitoring) of this PA.</p> <p>6. Coordinate regularly with the FTA and SHPD in connection with the Kako'o's observations and recommendations regarding the progress of the Project in implementing measures to resolve Adverse Effects called for under this PA.</p> <p>7. Report to the City, the FTA and SHPD concerning the existence, if any, of previously unidentified adverse effects of the Project on historic properties within the APE (that is, adverse effects which are not otherwise materially identified in the PA).</p> <p>8. Submit written reports concerning the progress of the Project in the implementation of the Stipulations set forth herein in accordance with the reporting requirements in Stipulation XIII.E., with copies available to any other interested party who so requests.</p> <p>9. Address requests by consulting parties to review deliverables and documentation that are provided to concurring parties.</p> <p>10. Collect any comments from the consulting parties that identify impacts different from those stated in this PA to historic properties located within the APE for City and FTA processing. The Kako'o shall research the issues presented as described in Appendix A and prepare a recommendation for the disposition of the request and action by FTA. The notification process for consulting parties to submit requests for consideration is outlined in Appendix A of this PA.</p> <p>11. Provide administrative support and technical assistance required by the consulting parties to meet the terms of this PA such as the timely submission of deliverables and the issuance of regular public updates regarding historic preservation issues.</p> <p>12. Develop a Best Practice Manual related to historic properties and a Section 106 "lessons learned" case study on the Project that may be helpful to future Section 106 processes on this and other projects. The Best Practice Manual and "lessons learned" case study will be made available to the consulting parties and other interested parties within one (1) year of the completion of Phase 1 construction.</p>	Kako'o GEC Architectural Historian	On-going throughout design, construction and operation as required by the stipulations in the PA	PA01c— Kako'o performs responsibilities defined in the PA.	Implementation of PA documented

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA Stipulation II: Traditional Cultural Properties (TCPs)					
PA02	Within thirty (30) days of execution of this PA, the City shall undertake a study to determine the presence of Traditional Cultural Properties (TCPs) within the Area of Potential Effect (APE), which includes cultural landscapes if present. Prior to construction commencement, the City shall meet with the State Historic Preservation Division (SHPD), consulting parties, and other parties with expertise, including Native Hawaiian Organizations (NHOs) to discuss and identify potential TCPs, as defined by the National Register Bulletin 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties. Building on cultural practices analysis already completed to address Act 50, Session Laws of Hawaii 2000 requirements, the City shall undertake studies to evaluate these TCPs for National Register of Historic Places (NRHP) eligibility in accordance with guidance in National Register Bulletin 38. The TCP study shall be completed by qualified staff with experience in ethnographic studies and TCP assessments for NRHP eligibility. If FTA determines that eligible TCPs are present, the City will complete effects assessments and seek SHPD concurrence on both eligibility and effects determinations. SHPD will have thirty (30) days to review eligibility and effect determinations. If FTA or the SHPD determine that there are adverse effects to eligible TCPs, the City shall meet with consulting parties to identify measures to avoid, minimize, or mitigate adverse effects. The City will complete all fieldwork, eligibility and effects determination, and consultation to develop treatment measures prior to the commencement of construction. The City shall complete any treatment measures prior to undertaking each construction phase that would adversely affect a TCP. Regardless of effect determination, the City will complete NRHP nominations for properties that meet the NRHP criteria for TCPs. The SHPD, National Parks Service (NPS) and consulting parties, including NHOs, will review draft NRHP nominations and provide comments within thirty (30) days of receipt. The City will consider all comments when completing final NRHP nominations. The City will submit final NRHP nominations to SHPD.	GEC Architectural Historian Kako'o GEC TCP specialist	Initiate 30 days from execution of PA Prior to construction meet with SHPD and consulting parties to identify potential TCPs	PA02a—Initiate study to identify TCPs (including cultural landscapes) within APE and	Completion of TCP Study and evaluation for NRHP eligibility in accordance with Act 50, Session Laws of Hawaii 2000 and guidance in National Register Bulletin 38 Receive SHPD concurrence on eligibility and effects determinations. Completion of treatment measures and submittal of NRHP nominations.
			After meeting with SHPD and consulting parties	PA02b—Complete TCP Study	
			After meeting with SHPD and consulting parties	PA02c—Evaluate TCPs for NRHP eligibility	
			Completion of TCP Study	PA02d— If TCP Study identifies TCPs eligible, complete effects determination	
			30 day SHPD review	PA02e—Seek SHPD concurrence on eligibility and effects determination	
			After 30 day SHPD review	PA02f—If adverse effects, meet with consulting parties	
			Prior to construction for each phase (Segments I-IV)	PA02g—For adverse effects to NRHP eligible TCPs, complete treatment measures	
			Prior to construction for each phase (Segments I-IV)	PA02h—For NRHP eligible TCPs, complete draft NRHP eligibility nominations	
			SHPD, NPS and consulting parties 30 day review of draft NRHP nominations	PA02i—Consider comments and complete final NRHP eligibility nominations	
PA Stipulation III: Identification and Protection of Archaeological Sites and Burials					
PA03	Initial Planning: develop an Archaeological Inventory Survey (AIS) Plan for the APE (as defined in the PA) for each construction phase and submit it to the SHPD and SHPD will provide comments to the City. The City will take SHPD’s comments into account in revising the AIS plan or accept the AIS Plan within thirty (30) days. The AIS Plan shall follow the requirements of Hawai’i Administrative Rules (HAR) Chapter 13-276, Rules Governing Standards for Archaeological Inventory Surveys and Reports.	GEC Architectural Historian Kako'o	Prior to construction for each phase (Segments I-IV) 30 day SHPD review of AIS Plan	PA03a—Develop an Archaeological Inventory Survey (AIS) Plan and submit to SHPD for review	Completion of AIS Plan prior to each construction phase.
		GEC Archaeologist		PA03b—Consider SHPD comments and revise or SHPD accepts AIS Plan	
PA04	Oahu Island Burial Council (OIBC), Lineal and Cultural Descendents, and NHO Consultation The City shall implement this archaeological stipulation before each of the four construction phases: Within sixty (60) days of execution of the PA, the City shall consult with the OIBC, lineal and cultural descendents, NHOs and other interested parties that are identified in discussion with OIBC, about the scope of investigation for the AIS Plan for construction of Phase 4. The City shall provide Preliminary Engineering plans and existing utility maps to assist in the scoping process. The AIS Plan will provide for investigation of the entire Phase 4 area, including from Waiakamilo Road to Ala Moana Center. In the portion of Phase 4 with the greatest potential for resources as identified in the Honolulu High-Capacity Corridor Project Archaeological Resources Technical Report (RTD 2008n), the AIS Plan will evaluate all areas that will be disturbed by the Project. The AIS Plan will include a review of historical shoreline location, soil type, and, where indicated by conditions, the survey measures listed in Stipulation III.C, including subsurface testing, for each column location, utility relocation, and major features of each station and traction power substation location based on Preliminary Engineering design data. The AIS Plan shall be submitted to the SHPD within four (4) months of execution of this PA. SHPD will provide comments on the AIS Plan to the City within sixty (60) days. The City will incorporate any timely comments in revising the AIS Plan. Archaeological investigation will begin following approval of the AIS Plan by the SHPD.	GEC Architectural Historian Kako'o GEC Archaeologist	Consult with OIBC and others within sixty (60) days of execution of the PA	PA04a—Coordinate with OIBC and consult with Lineal and Cultural descendents and NHO to develop scope of investigation for AIS Plan for Phase 4	Completion of AIS for Phase 4 that includes all elements specified in Stipulation PA04.
			Submit AIS Plan for Phase 4 to the SHPD within four (4) months of execution of the PA SHPD will provide comments on the AIS Plan to the City within sixty (60) days	PA04b—Develop AIS Plan for Phase 4 area, including from Waiakamilo Road to Ala Moana Center.	
			Complete AIS following SHPD approval of AIS Plan	PA04c—Complete AIS for Phase 4 (Middle Street to Ala Moana Center) prior to beginning Final Design for that area	

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PA05	The City, in coordination with the OIBC, lineal and cultural descendents, NHOs, and other interested parties that are identified in discussion with OIBC shall complete a draft protocol for consultation regarding treatment of any iwi kupuna identified during the AIS. It shall be provided to the OIBC for review within six (6) months of the execution of this PA. The protocol shall address, at minimum, a process for communication about any identified iwi kupuna, definitions that will be applied to the Project, identification and inclusion of lineal and cultural descendents and NHOs, and workflow of actions prior to and upon identification of iwi kupuna during AIS. The workflow shall provide for options to avoid moving iwi kupuna (preservation in place) versus relocation options. Avoidance shall include relocation of columns, change of column design to or from a center alignment to straddle bent or other alternatively-supported design, modification of span length, and alternate utility locations. The City will take into account any comments provided within sixty (60) days from the OIBC, lineal and cultural descendents, NHOs and other interested parties to finalize the draft protocol. The City will proceed in accordance with the protocol once it is approved by FTA.	GEC Architectural Historian GEC Archaeologist	Complete draft protocol for consultation regarding treatment of any iwi kupuna, define communication process, workflow actions and options, and provide to the OIBC for review within six (6) months of the execution of this PA	PA05a—Complete draft protocol for consultation regarding treatment of any iwi kupuna identified during the AIS.	The City will proceed in accordance with the protocol once it is approved by FTA
			The City will take into account any comments provided within sixty (60) days from the OIBC, lineal and cultural descendents, NHOs and other interested parties to finalize the draft protocol	PA05b—Complete final protocol for consultation regarding treatment of any iwi kupuna identified during the AIS	
				PA05c—FTA approval of protocol	
PA06	Fieldwork—The City shall conduct archaeological fieldwork as presented in the AIS Plan. For construction Phases 1, 2 and 3, the archaeological fieldwork shall be completed in advance of the completion of Final Design for each phase so that the presence of any sensitive archaeological sites/burials discovered during fieldwork may be considered during Final Design and measures incorporated to avoid and/or minimize adverse effects to historic properties. The City shall inform OIBC of status of the archaeological investigation	GEC Architectural Historian Kako'o GEC Archaeologist	Complete archaeological fieldwork for construction Phases 1, 2 and 3, the in advance of the completion of Final Design for each phase	PA06a—Complete fieldwork required by the AIS Plan, including, but not be limited to, the following: reconnaissance survey (archival research and visual inspection by pedestrian inventory) within the APE; survey of subsurface conditions with ground-penetrating radar (GPR), and subsurface inspection as warranted Include a description of archaeological methods specific and applicable to the findings will be used in analysis PA06b—Complete draft and final reports summarizing the results of the fieldwork and analysis and submit to the SHPD for review and approval PA06c—Inform OIBC of status of the archaeological investigation	Archaeological fieldwork completed and final reports accepted by SHPD for construction Phases 1, 2, and 3
PA07	Treatment Plans—Based on the results of the AIS fieldwork and in consultation with the SHPD, the City shall develop a specific treatment plan to avoid, minimize, or mitigate adverse effects to historic properties including archeological sites and burials pursuant to applicable state laws, including HRS Chapter 6E, Historic Preservation, and HAR Chapter 13-300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains, for each construction phase. Treatment plans shall be submitted to the SHPD for approval. Upon approval by the SHPD, the City shall implement the treatment plan.	GEC Architectural Historian GEC Archaeologist	Complete and obtain approval by SHPD on treatment plans prior to construction for each construction phase	PA07a—Any human remains found on lands owned or controlled by the Federal government will be addressed in accordance with the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. § 3001 et seq., in coordination with the affected land management agency	Treatment plans completed, approved by SHPD, and implemented, as required, for each construction phase
				PA07b—Confirm that guideway columns may be relocated a limited distance along the guideway at most column locations, allowing for preservation in-place to be viable in those locations	
				PA07c—If the OIBC determines that a burial is to be relocated, the City will consult with the OIBC to determine appropriate reinterment, which may include relocation to Project property in the vicinity of the discovery	
				PA07d—Complete treatment plan and submit to SHPD for approval	
				PA07e—Implement treatment plan	

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA08	Mitigation Plans—Subsequent to the archaeological fieldwork and development of the treatment plan, the City, in consultation with the SHPD, shall develop mitigation plans as appropriate. The mitigation plans may include the following: Archaeological Monitoring Plan—The City may develop an archaeological resources monitoring plan specifying the locations within the construction area that require a monitor and describing the level of monitoring necessary. Data Recovery Programs—Will be prepared by the City as appropriate in consultation with the SHPD. Whenever possible technological means will be used to avoid potential human remains and archaeological resources to minimize disturbance.	GEC Architectural Historian Kako’o GEC Archaeologist	Submit mitigation plan and monitoring reports to SHPD for each construction phase no later than 90 days after the completion of construction of that phase Complete data recovery prior to construction	PA08a—Develop and implement the mitigation plan	Mitigation plans completed and implemented prior to each construction phase
				PA08b—Develop a follow-up monitoring report and submit to SHPD	
				PA08c—Submit data recovery programs for review and approval by the SHPD	
				PA08d—SHPD verifies data recovery work complete prior to initiation of construction within the area of these sites.	
				PA08e—Submit data recovery plans to SHPD for review and approval that specify the disposition of recovered objects	
PA09	Curation—The City will curate recovered materials in accordance with HAR Chapter 13-278, Rules Governing Standards for Archaeological Data Recovery Studies and Reports. The City shall consult with public and private institutions to pursue an opportunity to provide public access to the recovered materials. Interpretive materials as described in Stipulation VII of this PA at one or more stations may incorporate archaeological materials recovered during development of the Project. Any human remains found on lands owned or controlled by the Federal government will be addressed in accordance with Native American Graves Protection and Repatriation Act (NAGPRA) in coordination with the affected land management agency.	GEC Architectural Historian GEC Archaeologist	Complete consultation for curation and interpretive materials upon completion of archaeological fieldwork, during design	PA09a—Consult with public and private institutions to provide public access to the recovered materials for inclusion of interpretive materials at one or more stations	Recovered materials are managed in accordance with federal and state regulations Recovered archaeological materials may be incorporated into stations
				PA09b—Any human remains found on lands owned or controlled by the Federal government will be addressed in accordance with NAGPRA in coordination with the affected land management agency	Acceptance of final design and construction closeout.
PA Stipulation IV: Design Standards					
PA10	The City shall develop standards for, and maintain and update the Project’s Design Language Pattern Book for all Project elements. The pattern book shall be available electronically. For stations within the boundary of or directly adjacent to an eligible or listed historic property, the City shall be guided by The Secretary of the Interior’s Standards for the Treatment of Historic Properties, 36 CFR Part 68, and will make every reasonable effort to avoid adverse effects to historic properties. If the standards cannot be applied, the City shall consult with the signatories, invited signatories and those listed as concurring parties to develop a treatment plan to minimize and mitigate adverse effects to the historic property. The City shall conduct a minimum of two neighborhood design workshops for the stations in each of the Project phases. The City shall notify all consulting parties of the workshops and consider any comments received when completing station design. Prior to Project entry into Final Design, the City shall provide Preliminary Engineering design plans for built components of the Project, such as stations, guideway, and directly related Project infrastructure improvements, to consulting parties for review and comment. For stations within boundaries of or directly adjacent to listed or eligible historic properties, the City shall also provide plans during the Final Design phase. The consulting parties shall provide the City with comments on the plans within 30 days of receipt. The City shall consider all comments provided by the consulting parties when completing Preliminary Engineering or Final Design plans.	GEC Architectural Historian	Prior to final design	PA10a—For stations within the boundary or directly adjacent to an eligible or listed historic property if the standards cannot be applied, the City shall consult with the signatories, invited signatories and those listed as concurring parties to develop a treatment plan to minimize and mitigate adverse effects to the historic property.	Comments from the community and consulting parties considered in final design
			Prior to final design	PA10b—Notify and hold two neighborhood station design workshops	
			Prior to final design	PA10c—Provide preliminary engineering plans to consulting parties for review and comment.	
			Consulting parties to comment on final plans within 30 days of receipt	PA10d—Provide final design plans for stations within the boundary or directly adjacent to an eligible or listed historic property	

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
Recordation and Documentation					
PA11	Within ninety (90) days of execution of this PA, the City shall complete draft Historic Context Studies related to relevant historic themes within the APE. This type of study assists in documenting the history of the affected area and may be used in developing NRHP nominations for historic properties in the area.	GEC Architectural Historian Kako'o	Complete draft Historic Context Studies within 90 days of execution of the PA Consider comments on draft scope of work from consulting parties within thirty (30) days.	PA11a—Develop a draft scope of work for the studies describing the context themes, research methodology, report format, photography specifications, and schedule for completion. The City will circulate a draft scope of work to the consulting parties	Completed Historic Context Studies
			Complete initial field work and photography for each study theme prior to construction in relevant geographic areas.	PA11b—Submit draft context studies to the SHPD for review	
			Reconcile all comments provided by the SHPD within thirty (30) days while preparing the final studies.	PA11c—Distribute copies of the final studies to repositories listed in Stipulation XIII.E.5	
PA12	<p>The City shall complete Cultural Landscape Reports (CLR) related to historic properties along the Honolulu High-Capacity Transit Corridor.</p> <p>1. Within ninety (90) days of execution of this PA, the City shall develop a draft scope of work for the CLRs describing the cultural landscapes to be studied, research methodology, report format, photography specifications, and project schedule. All work shall follow National Park Service guidance and standards, as appropriate, including National Register Bulletin 30, Guidelines for Evaluating and Documenting Rural Historic Landscapes and National Register Bulletin 18, How to Evaluate and Nominate Designed Landscapes, as well as relevant information presented in Guidelines for the Treatment of Cultural Landscapes. The City shall circulate a copy of the draft scope of work to the consulting parties.</p> <p>2. Any comments received by the City from consulting parties within thirty (30) days of receipt of the draft scope of work will be considered by the City in developing a final scope of work in consultation with the SHPD.</p> <p>3. Initial field work and photography for each study area shall be completed prior to construction commencement in that area.</p> <p>4. The City shall submit draft CLRs to the SHPD and consulting parties for review based upon a distribution list defined in advance in cooperation with the consulting parties. The SHPD will provide comments within thirty (30) days of receipt of draft materials. SHPD will have forty-five (45) days for review if multiple reports come in within ten days of each other. The City will consider all comments from the consulting parties and stakeholder groups while preparing final versions.</p> <p>5. Copies of the final CLRs shall be distributed to repositories listed in Stipulation XIII.E.5.</p>	GEC Architectural Historian Kako'o	<p>Complete draft scope of work for CLRs within ninety (90) days of execution of the PA Consider any comments on draft scope of work from consulting parties within thirty (30) Complete initial field work and photography for each study area prior to construction in that area</p> <p>SHPD will provide comments within thirty (30) days of receipt of draft materials. SHPD will have forty-five (45) days for review if multiple reports come in within ten days of each other</p>	<p>PA12a—Complete CLRs in accordance with National Park Service guidance and standards, as appropriate, including National Register Bulletin 30, Guidelines for Evaluating and Documenting Rural Historic Landscapes and National Register Bulletin 18, How to Evaluate and Nominate Designed Landscapes, as well as relevant information presented in Guidelines for the Treatment of Cultural Landscapes</p> <p>Submit draft CLRs to the SHPD and consulting parties for review based upon a distribution list defined in advance in cooperation with the consulting parties</p>	Completed Cultural Landscape Reports

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA13	<p>Historic American Building Survey (HABS), Historic American Engineering Record (HAER), and Historic American Landscape Survey (HALS) Recordation—</p> <ol style="list-style-type: none"> The City shall consult with the NPS HABS/HAER/HALS (HHH) coordinator in the Pacific West Regional Office to determine which of the historic properties that received adverse effect determinations will be documented by completing HHH recordation. After this determination, the NPS will stipulate the appropriate type and level of HHH documentation for each property. The City shall ensure that all HHH documentation for properties identified in V(C)(1) is completed in accordance with NPS recommendations, including requisite draft and final submission requirements. The City shall ensure that final HHH documentation is completed for a property and accepted by NPS prior to commencement of activities that could impact the historic property and/or affect its integrity. The NPS shall provide comments on draft report submittals within 30 days of receipt and will provide comments on final report submittals within 30 days of receipt. If the City includes multiple reports in a submittal or submits multiple reports within a 10-day period, NPS will be allowed 45 days for review. The City may request NPS to review the photographic documentation portion of a HHH report prior to completion of the full report, to accommodate construction schedules. The City shall only make such requests when the pace of the construction schedule makes it unlikely that a draft and final HHH report can be completed and reviewed in time for construction to commence on or near the specific property. In such instances, the City shall submit the archival black and white prints and negatives to NPS for review. NPS will provide comments within 30 days of receipt. The City will ensure that the full draft HHH report is submitted within 6 months of NPS approval of photographic documentation. 	GEC Architectural Historian	<p>Complete final HHH documentation and NPS for a property and NPS acceptance prior to commencement of activities that could impact the historic property and/or affect its integrity</p> <p>NPS to review the photographic documentation portion of a HHH report prior to completion of the full report, to accommodate construction schedules</p> <p>NPS will provide comments within 30 days of receipt. The City will ensure that the full draft HHH report is submitted within 6 months of NPS approval of photographic documentation</p>	<p>PA13a—Consult, determine which historic properties will be documented by HHH recordation, NPS will stipulate the type and level of HHH documentation for each property</p> <p>PA13b—All HHH documentation for properties identified in V(C)(1) is completed in accordance with NPS recommendations, including requisite draft and final submission requirements</p>	Acceptance of HHH by NPS
PA14	The City shall engage a professional photographer to complete archival photography to NRHP standards for all resources that received adverse effect determinations that are not subject to HHH documentation under Stipulation V.C. Photographic documentation will include, at a minimum, representative views of relevant historic structures associated with each historic property, and representative views of the surrounding setting of each historic property. These photographs will be offered to the repositories listed in Stipulation XIII.E.5. Per the schedule established by Stipulation XIII.E.3, the City shall consult with the SHPD to determine an appropriate level of written documentation for each above-ground historic property that is not documented under Stipulation V.C or VI. The SHPD will review this documentation upon completion.	GEC Architectural Historian Kako'o	Per the schedule established by Stipulation XIII.E.3	PA14a—Consult with the SHPD to determine an appropriate level of written documentation for each above-ground historic property that is not documented under Stipulation V.C or VI. Photographic documentation will include, at a minimum, representative views of relevant historic structures associated with each historic property, and representative views of the surrounding setting of each historic property	The SHPD will review this documentation upon completion.
PA15	The City shall have digital photographs taken by a professional photographer, in conjunction with the input of a supervising architectural historian, to document select resources and viewsheds within the APE. These photographs shall be taken prior to construction commencement and shall be used for interpretive materials, publications, cultural landscape reports, and historic context studies. Photographs will focus on NRHP-eligible resources and unique landscape features. Approximately 150 views will be submitted. These photographs will be housed at the City Municipal Library with copies submitted to the SHPD.	GEC Architectural Historian Kako'o	Per the schedule established by Stipulation XIII.E.3	PA15a—Professional photographers to take digital photos of select resources and viewsheds within APE: focus on NRHP-eligible resources and unique landscape features, input of supervising architectural historian approximately 150 photos.	The SHPD will review this documentation upon completion.
PA16	The City shall take a comprehensive video of the Project corridor prior to construction commencement. Video documentation shall be completed by a professional videographer and will consist of unedited footage filmed from a moving vehicle. The Project corridor shall be filmed from the vehicle in each direction, from Ala Moana to 'Ewa, and 'Ewa to Ala Moana. This film will be housed at the City Municipal Library with a copy submitted to the SHPD.	GEC Professional Videographer		PA16a—Complete video documentation of unedited footage filmed from a moving vehicle	Delivery of film to the City Municipal Library and SHPD

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National Register of Historic Places/National Historic Landmark Nominations					
PA17	<p>The City shall complete a NRHP Multiple Property Documentation (MPD) for Modern/Recent Past historic properties dating from 1939-1979. Additionally, the City shall complete a single Multiple Property Submission (MPS), including all appropriate accompanying documentation.</p> <p>1. The City and SHPD will consult with property owners to obtain access and determine their consent to the proposed listing. Listing procedures shall be consistent with HAR Chapter 13-197, Practice and Procedure before the Hawaii Historic Places Review Board and HAR Chapter 13-198, The Hawaii and National Registers of Historic Places Programs. Should owners object to listing or access, the City shall document the properties to the extent possible from public right-of-way and using available research or alternative properties may be selected by the City, in consultation with SHPD, for documentation. The SHPD will determine appropriate listing procedures according to Hawai'i Administrative Rules for the properties whose owners do not consent.</p> <p>2. As part of the MPD, the City will propose a list of Modern/Recent Past historic properties determined eligible for the NRHP to be advanced for nomination and will circulate it to the consulting parties.</p> <p>3. The City will consider any comments received from the consulting parties within thirty (30) days in developing a final list in consultation with the SHPD.</p> <p>4. The City shall submit a draft MPS nomination form to the SHPD and NPS for review and comment. The SHPD and NPS will provide any comments within thirty (30) days of receipt. The City shall consider all timely comments while preparing the final MPS documentation.</p>	GEC Architectural Historian Kako'o	Consulting parties and SHPD comments considered for final list of properties for NRHP MPD within 30 days	PA17a—Complete a NRHP Multiple Property Documentation (MPD) for Modern/Recent Past historic properties dating from 1939-1979	Complete NRHP MPDs and MPS
			SHPD and NPS comments considered on selection of MPS property that will be studied within 30 days	PA17b—Complete a single Multiple Property Submission (MPS), including all appropriate accompanying documentation	
			After final list of properties developed	PA17c—Consult with property owners to obtain access and determine their consent to the proposed listing. If owners object, will be documented from public ROW	
			After MDS is completed	PA17d—Propose and circulate a list of Modern/Recent Past historic properties eligible to be advanced	
			SHPD and NPS comments considered on MPS within 30 days of receipt	PA17e—Submit draft MPS nomination to SHPD and NPS	
PA18	<p>Pending the U.S. Navy approving the work and providing access to the site and relevant records, the City shall complete an update to the Pearl Harbor NHL nomination and the CINCPAQ Headquarters NHL nomination. For the Pearl Harbor NHL amendment, emphasis shall focus on those resources closest to the APE and to those not previously documented in the existing nomination. All work shall be coordinated with the Navy and follow the guidelines set forth in NATIONAL PARK SERV., U.S. DEPT OF THE INTERIOR, HOW TO PREPARE NATIONAL HISTORIC LANDMARK NOMINATIONS (1999). The work shall be carried out and approved by persons meeting the professional qualifications for historical architect or architectural historian in The Secretary of the Interior's Historic Preservation Professional Qualification Standards, 62 Fed. Reg. 33,713-14, 33719-20 (June 20, 1997). The City shall submit a draft document to the NPS, Navy, and SHPD. The City shall consider all comments received from NPS, Navy, and SHPD within 30 days in preparing the final NHL nomination. The City will provide the Navy with the updated NHL nominations and accompanying documentation, including requisite maps and photographs for submittal to the NPS.</p>	GEC Historical Architect	After U.S. Navy approves the work and provides access to the site and relevant records	PA18a—Coordinate with the Navy and complete an update to the Pearl Harbor NHL nomination and the CINCPAQ Headquarters NHL nomination	Completed NHL nominations update
			NPS, Navy and SHPD comments considered within 30 days	PA18b—Submit draft nominations to NPS, Navy and SHPD	
				PA18c—Submit final updated nominations to NPS, Navy and SHPD	

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PA19	<p>National Register Nominations</p> <p>1. The City shall complete NRHP nominations and/or amendments for all 31 of the 33 properties (Attachment 2 of the PA) that received adverse effect determinations located along the Project corridor. (Note that two resources are NHLs and are addressed in Stipulation VI.B.) The City will consult with the SHPD to determine if nomination forms for properties already listed in the NRHP should be updated and/or amended. The City and SHPD will consult with property owners to obtain access and determine their consent to the proposed listing. Should owners object to listing or access, the City shall document the properties to the extent possible from public right-of-way and using available research. This information will be provided to the SHPD, who will determine appropriate listing procedures according to Hawai'i Administrative Rules for owners who do not consent. All work shall conform to guidance presented in relevant National Register Bulletins. The City will complete all appropriate accompanying documentation, including photographs and mapping.</p> <p>2. The City will submit draft nomination forms to the SHPD for review. The SHPD will provide comments within thirty (30) days of receipt. The City will consider the comments and submit final NRHP nomination forms following the established procedures of the National Park Service under 36 CFR § 60.6(g). Final nomination forms will be completed before the Project begins revenue service operations.</p> <p>3. The City will also coordinate with the SHPD to nominate these historic properties to the Hawai'i Register of Historic Places if they are not already included.</p>	GEC Architectural Historian GEC Historical Architect Kako'o	After consultation with SHPD and property owners	PA19a—Complete NRHP nominations/amendments for 31 of the 33 properties receiving adverse effect determinations	Complete NRHP nomination forms for 31 affected properties.
			SHPD comment considered within 30 days	PA19b—Submit draft nomination forms to SHPD	
			Submit final forms prior to beginning revenue service operations	PA19c—Submit final nomination forms	
			During preparation of nomination forms	PA19d— Coordinate with SHPD to nominate historic properties to the Hawai'i Register	
PA20	Properties documented in the MPS required by Stipulation VI.A will not be documented on separate, individual NRHP forms beyond what is included in the MPS.	GEC Historical Architect Architectural Historian	Start of Mitigation PA19	PA20a—Ensure that NRHP nominations do not include the Pearl Harbor NHL nomination and the CINCPAQ Headquarters NHL nomination	Completed NRHP nomination forms for 31 affected properties
PA21	All NRHP and Hawai'i Register of Historic Places nominations will follow the procedures set forth in HRS Chapter 6E, Historic Preservation, and HAR Chapter 13-198, The Hawaii and National Registers of Historic Places Programs, as appropriate. Completion of the stipulated NRHP nominations does not guarantee listing; the Keeper of the NRHP may determine that the properties are not eligible for listing. Listing of any property in the NRHP is subject to NPS review and approval.	GEC Historical Architect	Start of Mitigation PA19	PA21a—Ensure that all NRHP nomination forms follow the procedures set forth in HRS Chapter 6E, Historic Preservation, and HAR Chapter 13-198, The Hawaii and National Registers of Historic Places Programs, as appropriate	Completed NRHP nomination forms for 31 affected properties
PA22	The City shall develop a searchable database of historic properties within the APE in a format suitable for public use. The database will include an interactive geographic component and include property information (e.g., property name, address, tax map key, construction date, architect, etc.). The City will initiate database development prior to construction commencement and will update and maintain the database for the duration of this PA. The Navy reserves the right to approve the inclusion of any Navy historic properties in any public database.	GEC Historical Architect	Initiate prior to construction commencement. Maintain through duration of this PA.	PA22a—Develop a searchable database of historic properties. Maintain database for the duration of this PA	Development and maintenance of searchable database for the duration of the PA.
PA23	The City will consult with the SHPD to develop a strategy for making this database and its information available to any organization with the authority and ability to develop, maintain, and support a public research database at the end of construction.	GEC Historical Architect Architectural Historian Kako'o	End of construction	PA23a—Coordinate with SHPD for database transfer following the end of construction	Documentation of coordination with SHPD and transfer of the database.

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Educational and Interpretive Programs, Materials, and Signage					
PA24	The City shall complete an interpretive plan for the Project area and install interpretive signage at appropriate locations. The interpretive plan will highlight historical themes (e.g., Native Hawaiian History, Native Hawaiian Culture, Immigrant History, Plantation Culture, Architecture, Government, Agriculture, Transportation, Military, etc.) and will interpret these themes at an appropriate station location. Interpretive signage will be installed at or near relevant transit stations and, where appropriate, inside transit vehicles.	GEC Architectural Historian Archaeologist	Before revenue service begins	PA24a—Prepare and complete an interpretive plan for the project area and highlight historic themes as appropriate at station locations, and where appropriate, inside transit vehicles	Preparation of Educational and Interpretive Programs, Materials, and Signage. Disseminated brochures at stations and educational materials to schools as appropriate Education materials included on Project website
	The City shall complete a color brochure describing the history of the area along the transit line. All materials shall also be produced in a digital format for electronic and/or online distribution. Upon completion, 1,000 physical copies of the product shall be printed and made available at stations to transit riders.	GEC Architectural Historian	Before revenue service begins	PA24b—Prepare and print 1,000 copies of a color brochure describing the history of the transit line and create a distribution plan for brochures to be disseminated at stations	
	The City shall prepare materials for children, such as a coloring book or child-friendly game that would educate children about relevant local history. The materials shall be prepared by professional historians and a professional illustrator. The City shall solicit student input to propose and develop the content for the materials. All materials shall also be produced in a digital format for electronic and/or online distribution. The materials will be available on the Project website.	GEC Architectural Historian Professional Illustrator	Before revenue service begins	PA24c—Prepare educational materials for children in digital format and make available on the Project website	
PA25	The City shall establish a Humanities Program that will explore human histories, cultures, and values. This program will enhance visitor and resident exposure to the depth of history and culture in the vicinity of the Project. The Humanities Program will educate the public about important topics in Hawaiian history through conferences/seminars, research fellowships, media programs, exhibits, lectures, and publications. The Humanities Program will also consider conducting select architectural surveys as a component of the potential program that may inform other program aspects. The City will develop this program's goals in consultation with consulting parties, and the City will provide one hundred thousand dollars (\$100,000) to fund this program. The City will establish subcommittees to achieve the goals of the Humanities Program and meet at agreed-upon intervals. In the absence of additional funding from the City, the Humanities Program will continue until all designated funds are exhausted or until revenue service begins, whichever occurs later.	GEC Architectural Historian	Before revenue service begins or when designated funds are exhausted	PA25a—Establish a Humanities Program in consultation with consulting parties	Establishment of a Humanities Program with funding and subcommittees
			Before revenue service begins or when designated funds are exhausted	PA25b—Establish a one hundred thousand (\$100,000) fund to be used for the Humanities Program	
			Before revenue service begins or when designated funds are exhausted	PA25c—Establish subcommittees to achieve the goals of the Humanities Program; subcommittees meet at agreed upon intervals	
PA26	The City will develop and implement an educational effort/program to encourage the rehabilitation of historic properties located along the transit route. This effort will include printed and electronic information about proper rehabilitation practices; benefits of historic designation; financial incentives available for eligible properties; and existing resources for assistance in pursuing these options. The City will hold two meetings and/or public workshops with owners of historic properties to disperse this information. The City will invite all owners of eligible or listed properties located within the APE and also within a 2,000 foot radius of station locations to the two meetings/workshops and will also announce the meetings/workshops to the public on the Project website. The meeting/workshops will be completed before revenue service begins. At the conclusion of the effort, the City will submit a summary report to the consulting parties.	GEC Architectural Historian	Before revenue service begins	PA26a—Develop and implement a historical properties rehabilitation educational effort	Development and implementation of an educational/effort program and preparation of a summary report
			Before revenue service begins	PA26b—Hold two public meetings/workshops to disperse the rehabilitation educational information	
			Before revenue service begins	PA26c—Prepare and submit a summary report to the consulting parties	
PA27	Based on the content developed in Stipulation VII.A, the City will develop an educational field guide of the historic properties (including historic districts) along the transit route. The City will make the field guide available to the public in both print and electronic formats.	GEC Architectural Historian	Before revenue service begins	PA27a—Develop an educational field guide in print and electronic formats	Development of a field guide.

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PA28	Consulting parties will be invited to participate in a kick-off meeting to develop a work plan, content for deliverables, and schedule for all products required within Stipulation VII. The City will circulate a draft of the work plan, preliminary content outline, and schedule to consulting parties following the kick-off meeting. The City will consider all comments received within thirty (30) days while preparing the final work plan and schedule in consultation with the SHPD.	GEC Architectural Historian Kako'o	Before development of education effort/program, including educational field guide SHPD comments considered while preparing final work plan within 30 days	PA28a—Organize and hold a kick-off meeting for consulting parties	Completed final work plan.
				PA28b—Circulate a draft work plan, preliminary content outline, and schedule to consulting parties following the kick-off meeting	
				PA28c—Prepare a final work plan and schedule in consultation with SHPD	
PA29	The City will submit drafts of all work products required in Stipulation VII (PA24) to the consulting parties for review and comment. The consulting parties will provide comments on the content, design, and other relevant product components within thirty (30) days of receipt of draft materials. The City will consider all comments while preparing final versions.	GEC Architectural Historian Kako'o	SHPD comments on work products required in Stipulation VII (PA24) within thirty (30) days of receipt.	PA29a—Submit all draft work products required in Stipulation VII to consulting parties	Documentation of submittal of all draft work products required in Stipulation VII to consulting parties.
				PA29b—Consider all comments received while finalizing all work products required in Stipulation VII	
Specific Historic Properties					
PA30	All lava rock curbstones removed along the edges of pavement because of Project-related work shall be retained by the City for reuse and reinstallation. The stones will be marked prior to removal, stored securely, and replaced at their approximate original mile-point locations prior to the beginning of revenue service operation. Any stones that are damaged or destroyed during extraction or reinstallation shall be replaced with in-kind materials.	GEC Architectural Historian GEC CRE GEC DM	During design and construction	PA 30a—Lava rock curbstones are marked prior to removal, stored securely, and replaced at their approximate original mile point locations	Construction Closeout documenting handling and treatment of lava rock curbstones.
				PA30b—Damaged stones are replaced with in-kind materials	
PA31	The bridge rails on the Kapālama Canal Bridge must be replaced or retrofitted to meet current safety standards. The City will maintain or replace the rails to match the appearance of the historic rails and to maintain existing views to and from the bridge. The City shall consider The Secretary of the Interior's Standards for the Treatment of Historic Properties, 36 CFR pt. 68, in developing draft plans to provide to SHPD for review per Stipulation IV.	GEC Architectural Historian GEC CRE GEC DM	During design and construction	PA31a—Replace bridge rails on the Kapālama Canal Bridge. Design to match the appearance of the historic rails and to maintain existing views to and from the bridge	Acceptance of final design and construction closeout.
				PA31b—Replaced bridge rails during construction	
PA32	The City will replace true kamani trees within the corridor as close as feasible to the current location of the group of 28 true kamani trees on the makai side of Dillingham Boulevard that will be removed. The City will replace the trees prior to revenue service operation. In consultation with the SHPD landscape plans will be developed by the City during Final Design so that new plantings will provide similar advantages to the community. If new plantings do not provide “equitable mitigation” (e.g., older mature trees that are removed), additional younger trees will be planted that will, in time, develop similar benefits.	GEC Architectural Historian GEC CRE GEC DM	During design and construction	PA32a—Replace existing true kamani trees within the corridor as close as feasible to the current location of the group of 28 true kamani trees on the makai side of Dillingham Boulevard	Acceptance of final design and construction closeout.
				PA32b—Consult with the SHPD during landscape plan final design	
PA33	Improvements to Adversely Affected Parks 1. The City will invite consulting parties, property owners, and other stakeholders to participate in a kick-off meeting to discuss improvements to adversely affected historic parks. Based upon design standards contained in Stipulation IV, and considering comments offered at the kick-off meeting, the City will develop and circulate a draft park improvement plan to consulting parties. The City will consider all comments received within thirty (30) days while preparing the final plan in consultation with the SHPD.	GEC Architectural Historian Kako'o GEC CRE GEC DM	During design and construction	PA33a Organize and hold a kick-off meeting for consulting parties, property owners and stakeholders	Acceptance of final design and construction closeout.
				PA33b—Circulate a draft park improvement plan, to consulting parties following the kick-off meeting	
				PA33c Prepare a final park improvement plan in consultation with SHPD	

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PA34	2. The City shall consider The Secretary of the Interior’s Standards for the Treatment of Historic Properties, 36 CFR pt. 68, and make every effort to avoid adverse effects to historic properties.	GEC Architectural Historian GEC DM	During design and construction	PA34a—All final designs shall consider 36 CFR pt. 68 during plan development in order to avoid adverse effects to historic properties	Acceptance of final design
PA35	3. The City will ensure completion of the park improvement plan before construction is complete.	GEC CRE Kako'o	During construction	PA35a—Prepare a final park improvement plan in consultation with SHPD	Construction closeout
PA36	4. Project funds in the sum of seven hundred fifty thousand dollars (\$750,000) shall be budgeted for implementation of the parks improvement plan. Should the City, following consultation with consulting parties, property owners, and stakeholders, determine that circumstances preclude improving these parks, Project funds budgeted for parks shall be transferred for use to the Honolulu High-Capacity Transit Corridor Project Historic Preservation Committee (Stipulation IX.B).	City and County of Honolulu GEC Architectural Historian	During design and construction	PA 36a—Provide \$750,000 for implementation of the park improvement plan	Implementation of the park improvement plan.
				36b—Consult with consulting parties, property owners and stakeholders to determine if the \$750,000 can be used on park improvements	
				PA36c—transfer unused funds budgeted for parks to the Project’s Historic Preservation Committee	
PA Stipulation IX. Measures to Address Reasonably Foreseeable Indirect and Cumulative Effects Caused by the Project					
PA37	The City shall include a staff position for a qualified Project Architectural Historian, defined in Stipulation I.F. The architectural historian shall oversee completion of the stipulations of this PA, coordinate with the SHPD, Kako'o(s) and other consulting parties, and coordinate with the Department of Planning and Permitting regarding land use planning activities, including the integration of transit-oriented development with historic preservation in the vicinity of Project stations.	City and County of Honolulu	Within six months of the execution of the PA.	PA37a—Hire an architectural historian for the project	Staff hired (See PA01)
PA38	The City, in consultation with the consulting parties, shall create, chair, and provide technical, administrative, and financial support for the operation of a Honolulu High-Capacity Transit Corridor Project Historic Preservation Committee (HPC). The City shall allocate two million dollars (\$2,000,000) within the Project’s budget to fund the program administered by the HPC. The City will create and schedule the first meeting of the HPC within three months after execution of this PA. Prior to the creation of the HPC, the City will submit to the SHPD for approval, a list of the agencies, groups, and organizations that will be invited to be represented and serve on the HPC. The HPC shall comprised the following seven (7) members: the director of DTS, or his designee, to serve as a voting member and chair of the HPC; one representative, or its designee, from each of the following: SHPD, Department of Transportation Services (DTS), and Department of Planning and Permitting (DPP); and one representative each from three (3) non-governmental groups or organizations with expertise in historic preservation, cultural resources, architecture, planning, or landscape architecture. The HPC shall establish the goals, criteria, program guidelines, administrative procedures, and funding distribution for the disposition of these funds that will be provided by the City for exterior improvements to eligible or listed historic properties (including contributing resources within historic districts) within the Project’s APE consistent with The Secretary of the Interior’s Standards for the Treatment of Historic Properties, 36 CFR pt. 68, accomplished through grants provided under this section. The HPC shall identify and select an entity or entities that will administer the funds for the purposes established. This entity or entities shall be compliant with the requirements of Chapter 6, Article 29 of the Revised Ordinances of the City and County of Honolulu 1990, as amended, Standards for the Appropriation of Funds to Private Organizations. The City will dissolve the HPC when the funds are exhausted, but no later than three (3) years after completion of the Project, whichever occurs first.	City and County of Honolulu GEC Architectural Historian RTD PEM	Within three months of the execution of the PA	PA38a—Create, chair, and provide technical, administrative, and financial support for the operation of a Honolulu High-Capacity Transit Corridor Project Historic Preservation Committee (HPC)	Funding of HCP
				PA38b—Fund the HCP with \$2,000,000	
				PA38c—Coordinate with SHPD regarding the selection of members to serve on the HCP	
				PA38d—Identify and select an entity to administer the funds for the HCP	

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA39	To examine Project impacts related to development along the Project corridor, the City shall monitor the proposed demolition of resources built before 1969 within the APE and within a 2,000-foot radius of each station. This shall occur by monitoring demolition permits. The City shall establish a baseline for demolitions by calculating an annual average and standard deviation of demolitions that occurred within these areas between 2005 and 2008. The City shall include this baseline data and an explanation of its relevance to project planning and implementation in the first six-month report submitted pursuant to Stipulation XIII.E.3. The SHPD shall provide location information on eligible or listed historic properties within the 2,000-foot radius of each station location. If and when in any year during project construction the number of demolitions of listed or eligible resources within the APE or resources within the station areas built before 1969 is greater than one standard deviation above the baseline, then the City shall notify the consulting parties during each scheduled quarterly or annual review of the PA.	GEC Architectural Historian	During design and construction Notify consulting parties if one standard deviation is attained at each scheduled quarterly or annual review of the PA	PA39a—Monitor demolitions permits and calculate historical statistics of demolition activity for an area of a 2,000-foot radius around each station PA39b—Notify consulting parties if demolitions around stations exceed one standard deviation of historical demolition statistics	Demolition completed in compliance with state and federal laws
PA40	If any signatory to this PA finds during the duration specified in stipulation XIV.D that there is likely to be an imminent and significant adverse indirect or cumulative effect on a resource determined eligible for the National Register as part of the Section 106 process for this project and that the adverse effect was not evaluated in this PA, that signatory shall notify FTA. If consulting parties identify during the duration of this PA an imminent and significant adverse indirect affect on a resource determined eligible for the National Register as part of the Section 106 process for this project and that adverse effect was not evaluated in this PA, the consulting party shall follow procedures identified in Stipulation I.G.10 Upon such notification, FTA will call a meeting of the consulting parties to discuss what next steps would be appropriate under the new circumstances to mitigate the effects on such resources.	GEC Architectural Historian	On-going through design and construction	PA40a—Notify FTA if there is likely to be an imminent and significant adverse indirect or cumulative effect on a resource determined eligible for the National Register as part of the Section 106 process for this project and that the adverse effect was not evaluated in this PA PA40b—Comply with Stipulation I.G.j.	Documentation that procedures in Stipulation I.G.10. were followed
PA41	In addition to the mitigation presented in this stipulation, mitigation for indirect and cumulative effects is provided in Stipulations IV.A-C and VII.A-F.	GEC Architectural Historian	On-going through design and construction	PA41a—Comply with Stipulations IV.A-C and VII.A-F	Documentation that procedures in Stipulation I.G.j. were followed
Construction Protection Plan					
PA42	During Final Design, DTS, in cooperation with its contractors and FTA, will develop a Construction Mitigation Plan (CMP). The CMP will include a Noise and Vibration Mitigation Plan. Per requirements to be included in the FTA Record of Decision (ROD) and FTA guidance entitled, TRANSIT NOISE AND VIBRATION IMPACT ASSESSMENT, FTA-VA-90-1003-06 (2006) (FTA Guidance Manual), DTS shall perform quantitative assessments of both noise and vibration which will inform the CMP. Noise and vibration control plans will be updated every six (6) months. The updated plans should predict the construction noise and vibration impacts at sensitive receptor locations based upon the proposed construction equipment and methods. Appropriate construction plan noise and vibration mitigation measures shall be employed as identified in FTA's Guidance Manual. Numeric limits and monitoring measures will be developed to minimize noise and vibration impacts. Vibration criteria included in Table 12-3, Construction Vibration Damage Criteria, of the FTA Guidance Manual will be applied. Note that most historic properties in the corridor are non-engineered timber or masonry; a criterion of 0.2 inches per second of peak particle velocity would be applicable to these structures. Noise and vibration mitigation strategies will be included in the Noise and Vibration Mitigation Plan.	GEC Architectural Historian GEC ECM	During design, prior to construction for each contract	PA42a—Develop Construction Mitigation Plan to include a Noise and Vibration Mitigation Plan	Documentation of approved CMP
PA43	Before Project construction begins, the City shall meet with the construction contractor(s) to review and transmit the CMP.	GEC ECM	Start up of contractor notice to proceed	PA32a—Meet with contractor to develop Construction Mitigation Plan to include a Noise and Vibration Mitigation Plan	Documentation of meetings
PA44	The City will monitor Project construction to ensure that the measures in the CMP are implemented and shall provide a record of monitoring activities in progress reports prepared pursuant to Stipulation XIII.E.	GEC ECM	Ongoing during construction	PA44a—Monitor Project construction to ensure that the measures in the CMP are implemented.	Record of monitoring activities in progress reports

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA45	With the cooperation of the Navy, the City shall complete post-construction noise monitoring as stipulated in the Project’s final environmental impact statement within U.S. Naval Base, Pearl Harbor NHL.	GEC ECM	Post construction	PA45a—Complete post-construction noise monitoring with cooperation with the Navy for U.S. Naval Base, Pearl Harbor NHL	Report that documents results of the post-construction noise monitoring
PA46	The City, in consultation with FTA shall ensure that any inadvertent damage resulting from the Project to historic properties shall be repaired, to the extent possible, in accordance with The Secretary of the Interior’s Standards for the Treatment of Historic Properties, 36 CFR pt. 68. The City, in consultation with the FTA, shall submit a scope of work or treatment plan to address inadvertent damage to the SHPD for comment before initiating repairs.	GEC ECM CEC CRE	Develop plan at start of contracts, ongoing during construction	PA46a—Damage resulting from the Project to historic properties shall be repaired, to the extent possible	Documentation in incident reports of damage, repairs, and coordination to mitigate damage
				PA46b—Submit a scope of work or treatment plan to address inadvertent damage to the SHPD for comment before initiating repairs	
City Contractors and Contractors and Contract Adherence to PA					
PA47	FTA and the City shall ensure that contracts developed in the implementation of all construction phases of the Project shall expressly refer to and require compliance with the stipulations of this PA. Contractors responsible for work set forth in this PA shall have qualified staff that meet the Secretary of Interior’s Professional Qualification Standards 48 Fed. Reg. 44,738-39 (Sept. 29, 1983), for history, archeology, architectural history, architecture, or historic architecture with experience in historic preservation planning to ensure the satisfactory compliance with the terms of the PA during the design and construction of each project construction phase. The Kako’o will provide guidance regarding the implementation of the terms of this PA to all contractors, particularly those involved in construction-related activities. The City shall require, on an annual basis, or more frequently as circumstances require, historic preservation and cultural awareness training for the construction contractors and employees. The training shall include information related to the following topics: a) Illegal collection and disturbance of historic and prehistoric cultural materials, including human remains. b) Scope of applicable laws and regulations. c) Initial identification and reporting of archeological materials, human remains, and historic buildings or structures that may potentially be discovered during the course of their work. Training materials, schedules and lists of persons trained will be made available to the consulting parties of this PA and other interested parties on an annual basis.	GEC Architectural Historian GEC ECM CEC CRE	Annually, or more frequently as circumstances require, historic preservation and cultural awareness training for the construction contractors and employees Training materials, schedules and lists of persons trained will be made available to the consulting parties of this PA and other interested parties on an annual basis	PA47a—Ensure that contracts developed in the implementation of all construction phases of the Project shall expressly refer to and require compliance with the stipulations of this PA	Documentation of PA stipulations in contracts and contractor Environmental Compliance Plans
				PA47b—Provide guidance regarding the implementation of the terms of this PA to all contractors, particularly those involved in construction-related activities	
Post-Review Discoveries					
PA48	Post-review discoveries are not anticipated for built historic properties. Notwithstanding, the City agrees to cease all work in the vicinity of the discovery should an unanticipated adverse effect on a built historic property be found. The City will notify the signatories and provide information about the unanticipated adverse effect and the City’s proposed treatment plan within a period of three (3) business days. Signatories will provide comments on the City’s proposed treatment plan within three (3) business days. The City will consider any timely comments in developing a final treatment plan in consultation with FTA. FTA will not allow work to resume in the vicinity of the unanticipated adverse effect until a treatment plan has been finalized. The City will proceed in accordance with the treatment plan.	GEC ECM GEC Architectural Historian	Ongoing during construction Notification of discovery to signatories within 3 days –signatories will provide comments to proposed treatment plan within 3 days	PA48a—Cease all work in the vicinity of the discovery should an unanticipated adverse effect on a built historic property. Work will not resume until FTA has finalized the treatment plan	Documentation of discovery and process and coordination of finalized treatment plan

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA49	<p>Because of the linear nature of the Project and because any areas excavated for the placement of piers to support the elevated structures, foundations for buildings and structures, utility installation, grading to provide parking, or other construction-related ground disturbance, including preparation of construction staging areas and the new location of any utilities that will be relocated by the Project, will be the subject of a comprehensive AIS, post-review archaeological discoveries after completion of AISs are not anticipated.</p> <p>In the event of any inadvertent discoveries of burials, the OIBC shall be included in consultation as specified in HAR § 13-300-40. When suspected human skeletal remains are found, the City shall ensure that all work in the vicinity stops and that a City archaeologist will secure the area to avoid any additional disturbance, pursuant to HRS § §6E-43.6. If the remains are identified to be human, the City will notify SHPD as required by law. (Non-human remains that are determined by the Project archaeologist not to be a protected resource will be documented in Project files and no further action taken.) With confirmed human skeletal remains, the archaeologist must also notify the OIBC, the County Coroner's Office, and the County Police Department. With all inadvertent burial finds, SHPD determines burial treatment, either preservation in place or relocation, in consultation with the landowner, the district representative of the OIBC, and any recognized cultural or lineal descendents or NHOs for the Project. Pursuant to §§ 6E-43.6(c) and (d), SHPD has one (1) day to make its treatment determination for single burials and two (2) days for multiple burials found on O'ahu. Recognizing the extent of the Project and the sensitivity of any discoveries, the Project will allow an extended time for SHPD determination of treatment by an additional three (3) days for a total of four (4) days for single burials and five (5) days for multiple burials; provided that this extension of time shall not affect other obligations, duties, or responsibilities required under HRS Chapter 6E and applicable regulations. Information generated in the AISs in Stipulations III.B, III.C and III.D will assist SHPD and OIBC in identifying and notifying lineal and cultural descendants and defining a treatment plan since background research is an integral component of the AIS. Construction must remain halted in the vicinity of the burial find until SHPD's treatment decision has been carried out or any other requirements of law have been met.</p>	<p>GEC Archaeologist GEC ECM Kako'o</p>	<p>SHPD has one (4) day to make its treatment determination for single burials and two (5) days for multiple burials found</p>	<p>PA49a—In the event of any inadvertent discoveries of burials, the OIBC shall be included in consultation</p> <p>PA49b—Stop work order if human skeletal remains are found, notify SHPD, the OIBC, the County Coroner's Office, and the County Police Department</p> <p>PA49c—SHPD and OIBC identify and notify lineal and cultural descendants and define a treatment plan</p> <p>PA49d—Construction must remain halted in the vicinity of the burial find until SHPD's treatment decision</p>	<p>Documentation of the process and coordination</p>

Mitigation ID	Commitment from Section 106 Programmatic Agreement	Responsible Parties for Implementing Stipulations (will conduct or oversee action)	Timing	Actions or Processes for Implementing Stipulation (by Mitigation ID)	Criteria for Satisfying PA Stipulation/Completing Mitigation
PA50	<p>The City, in consultation with the OIBC and the SHPD, will be responsible for carrying out the burial treatment for post-review discoveries.</p> <p>1. For preservation in place, the City will modify the planned construction to allow for the remains to stay in place in accordance with the burial treatment plan.</p> <p>2. Pursuant to HRS §6E-43.6(f), in cases where remains are archaeologically removed, SHPD shall determine the place of relocation, after consultation with the City, OIBC, affected property owners, representatives of the relevant ethnic group, and any identified lineal descendants, as appropriate.</p> <p>Parties identified in this Stipulation XII.C will consider the inclusion of either of the following two provisions in a post-review discovery treatment plan: (1) If a reinterment site was not identified in a Treatment Plan in Stipulation III.D, the City will disinter the remains, curate the remains at the Project site until the associated Project phase is completed and then immediately arrange for reinterment within the Project area; or (2) If reinterment sites are identified as part of the Treatment Plans in Stipulation III.D, immediate reinterment to those identified sites will be the preferred practice</p> <p>3. The City will document burial treatment in either a “burial site component of an archaeological data recovery plan” for burials that are relocated, or a “burial site component of an archaeological preservation plan” that documents the burial treatment that was carried out. These plans/reports document the conditions of the discovery, the burial treatment, access and any subsequent measures that have been agreed to by the landowner to safeguard either the relocation site or the preserve site. The City will record preserved or relocated burial sites with the Bureau of Conveyances so that the burial sites are not further disturbed in the future.</p>	<p>City and County of Honolulu</p> <p>GEC Architectural Historian</p> <p>Kako’o</p>	As needed	<p>PA50a—For preservation in place, the City will modify the planned construction to allow for the remains to stay in place in accordance with the burial treatment plan</p> <p>PA50b—Where remains are archaeologically removed, SHPD shall determine the place of relocation, after consultation with the City, OIBC, affected property owners, representatives of the relevant ethnic group, and any identified lineal descendants, as appropriate</p> <p>PA50c—Document burial treatment in either a “burial site component of an archaeological data recovery plan” for burials that are relocated, or a “burial site component of an archaeological preservation plan” that documents the burial treatment that was carried out and record with Bureau of Conveyances</p>	Documentation of reports and coordination
PA51	Any human remains found on lands owned or controlled by the Federal government will be addressed in accordance with NAGPRA in coordination with the affected land management agency.	<p>City and County of Honolulu</p> <p>Kako’o</p>		PA51a—Any human remains found on lands owned or controlled by the Federal government will be addressed in accordance with NAGPRA in coordination with the affected land management agency	Addressed and documented in accordance with NAGPRA in coordination with the affected land management agency
Public Involvement					
PA52	<p>Elements of public involvement and information are included throughout this PA. In addition, the City shall undertake the following:</p> <p>A. To keep the public informed about PA implementation, the semi-annual progress reports described in Stipulation XIV.E will be posted on the Project website.</p>	GEC Public Involvement Manager	Semi-annually	Semi-annual progress reports posted on the website	Document reports are prepared and posted
PA53	B. With the exception of sensitive information or locations, the City shall add all documentation completed as part of this PA to the historic properties database that will be created as part of Stipulation VI.F. However, if the consulting parties agree, the sensitive information or locations may be included in a password-protected mode.	GEC Architectural Historian	On-going during design and construction	PA53a—With the exception of sensitive information or locations, add all documentation completed as part of the PA to the historic properties database that will be created.	Document historic database is created and updated
PA54	C. At any time during implementation of the activities covered in this PA, should an objection pertaining to this PA or the effect of any activity on historic properties be raised by a member of the public, FTA will notify the signatories to this PA and take the objection into account, consulting with the objector, and should the objector so request, with any of the parties of this PA, to resolve the objection.	GEC Architectural Historian	On-going during design and construction	PA54a—With a public objection to PA or effect of Project activity on historic property, FTA will notify signatories to take objection into account and consult with this person and with PA parties to resolve objection	Document resolution
Administrative Provisions					
PA55	Implementation Schedule—Within sixty (60) days of the execution of this PA, the City shall develop a schedule for the implementation of the provisions of this PA. The City will submit the schedule to the signatories and concurring parties for review and comment. The final schedule will include timelines and milestones for completion of deliverables and will be posted on the Project website. The City will update the schedule to reflect Project changes and will notify the signatories and concurring parties of any alterations to the schedule.	GEC Architectural Historian	Develop a schedule for the implementation of the provisions of this PA within sixty (60) days of the execution	PA55a—Submit schedule to signatories, final schedule to include timelines and milestones and will be updated as needed	Document schedule is prepared and submitted

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PA56	Project Modifications—Should the Project alignment be changed in any way that FTA determines results in a change to the APE, the City shall update the APE maps, and FTA and the City, in consultation with other consulting parties, shall ensure that the requirements of this PA are met, after further consultation and assessment of effects, with regard to the new portions of the APE.	GEC Architectural Historian GEC EM GEC ECM	On-going through design and construction	PA56a—Changes to Project that affect APC require City to update maps and to consult with Consulting Parties to assess new APE	Document Project changes
PA57	Dispute Resolution—Should any Signatory or Invited Signatory to this PA object to any action proposed pursuant to the PA, the FTA shall consult with the objecting party to resolve the objection. If the FTA determines that the objection cannot be resolved, the FTA shall forward all documentation relevant to the dispute, including FTA's proposed resolution, to the ACHP. 1. Within thirty (30) days after receipt of all pertinent documentation, the ACHP shall provide the FTA with its advice on the resolution of the objection. FTA will then prepare a written response that considers any timely advice offered by the ACHP or by other signatories to the PA. FTA will provide all consulting parties with a copy of this written response and proceed according to its final decision. 2. If the ACHP does not provide its advice regarding the dispute within thirty (30) days of receiving appropriate documentation about the dispute, FTA may make its final decision on the dispute and proceed accordingly. Prior to reaching a final decision, FTA shall prepare a written response that considers any timely comments by other signatories to the PA and provide them and the ACHP with a copy of that response 3. The responsibility of the FTA and the City to carry out all actions that are required by this PA and are not affected by the dispute remains unchanged.	GEC Architectural Historian GEC ECM	(30) days after receipt of all pertinent documentation, the ACHP will provide the FTA with its advice on the resolution of the objection FTA will make final decision if ACHP does not respond within 30 days upon receipt	PA57a—Follow this resolution process if any invited/signatory objects to PA proposed action FTA to forward documentation. PA57b—FTA to provide written response and copy consulting parties PA57c—FTA prepares a written response that considers any timely comments by other signatories to the PA and provide them and the ACHP with a copy PA54d—FTA FTA and the City have responsibility to carry out all actions in PA regardless of disputes	Document resolution process
PA58	Duration 1. This PA shall take effect on the date it is signed by the last signatory and shall be in effect for ten (10) years from the date of execution, or terminated pursuant to Stipulation XIV.I. At least six (6) months prior to the end of the 10-year period, FTA will provide an update on the status of the work associated with all stipulations. At that time, and before the 10-year period elapses, the signatories may amend the content of the PA, which may include extension of the duration of the PA, in accordance with Stipulation XIV.H if they determine that it is necessary to complete all stipulations.	GEC EM GEC ECM RTD PEM	PA takes effect on the date it is signed by the last signatory and shall be in effect for ten (10) years from the date of execution. At least six (6) months prior to the end of the 10-year period, FTA will provide an update on the status of the work associated with all stipulations	PA58a—Signatories may amend the content of the PA, which may include extension of the duration of the PA, in accordance with Stipulation XIV.H if they determine that it is necessary to complete all stipulations	Complete and submit reports documenting PA activities
PA59	Monitoring and Reporting 1. Any signatory to this PA may request, at any time, a review of the implementation of the terms of this PA. 2. For the first twenty-four months following the implementation of this PA, the City shall hold quarterly (every three months) meetings with the consulting parties to discuss implementation of this PA including near-term planned activities. 3. Every six (6) months following the execution of this PA, until it expires or is terminated, the City shall provide all signatories to this PA a summary report detailing the work undertaken pursuant to its terms. Such report shall include any scheduling changes proposed, any problems encountered, and any disputes or objections received during efforts to carry out the terms of the PA. 4. After the 24-month period mentioned in Stipulation XIV. E. 2., FTA shall conduct annual meetings of consulting parties to discuss implementation of this PA over the preceding year and planned activities for the coming year. FTA shall evaluate the effectiveness of this PA and whether any amendments or changes are needed based on the City's summary reports or Project modifications and provide its evaluation to the signatories prior to the meeting 5. Work products not containing sensitive information will be submitted to the following repositories so that the information generated is made available to the public: SHPD, State Publications Distribution Center (15 copies), University of Hawai'i, and the Municipal Library (3 copies).	GEC Architectural Historian GEC EM GEC ECM RTD PEM	On-going during design and construction Quarterly meetings held for the first 24-months to discuss implementation of PA. After that meetings will annual Summary report every 6-months	PA59a—PA signatory may request a review of implementation of terms at any time. PA59b—After 24 months FTA to evaluate PA effectiveness based on City summary reports PA59c—(The number of copies) of appropriate work products made available to SHPD, UH, municipal library (3) and State Publications Distribution Center (15)	Document PA implementation as part of environmental mitigation monitoring

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PA60	Emergency Situation—Immediate rescue and salvage operations conducted to preserve life or property are exempt from the provisions of Section 106 of the NHPA and this PA. In the event that an emergency situation should occur during the Project, FTA shall follow the provisions of 36 CFR § 800.12.	GEC Architectural Historian GEC EM GEC ECM RTD PEM	As needed during design and construction	PA60a—Conduct rescue and salvage operations as needed	Document activities
PA561	Coordination with Other Federal Involvement—In the event that the City or other agency applies for additional federal funding or approvals for the Honolulu High-Capacity Transit Corridor Project and the undertaking remains unchanged, such funding or approving agency may comply with Section 106 of the NHPA by agreeing in writing to the terms of this PA and notifying the signatories. Any necessary amendments will be considered in accordance with Stipulation XIV.H.	GEC Architectural Historian	As needed during design and construction	PA61a—Coordination with Other Federal Involvement—In the event that the City or other agency applies for additional federal funding or approvals for the Honolulu High-Capacity Transit Corridor Project	Document coordination activities
PA62	Amendments—Any signatory to this PA may propose that this PA be amended, whereupon the signatories to the PA shall consult to consider such amendment. Any amendment must be agreed to in writing by all signatories. The amendment will be effective on the date a copy with all signatures is filed with the ACHP.	GEC Architectural Historian	As needed during design and construction	PA62a—PA signatories may propose PA amendments, whereupon the signatories to the PA shall consult to consider such amendment and agree in writing and file with ACHP	Document amendments to the PA
PA63	Termination—If any signatory to this PA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatory parties to attempt to develop an amendment per Stipulation XIV.H. If within thirty (30) days (or another time period agreed to by all signatories) an amendment cannot be reached, any signatory may terminate the PA upon written notification to the other signatories. Once the PA is terminated and prior to work continuing on the undertaking, FTA must either: (1) execute a new agreement pursuant to 36 CFR § 800.6; or (2) request, take into account, and respond to comments of the ACHP under 36 CFR § 800.7. FTA shall notify the signatories as to the course of action it will pursue. This PA may be terminated by the execution of a subsequent agreement that explicitly terminates this PA or supersedes its terms. Execution of this PA by FTA, SHPD, and the ACHP and implementation of its terms evidence that FTA has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.	GEC Architectural Historian	Work on PA amendment for 30 days or other timeframe established by all signatory parties before requesting PA termination.	PA63a—PA signatories may determine its terms will not or cannot be carried out and shall immediately consult with other signatory parties to develop an amendment	Document activities
				PA63b—Termination requests, take into account, and respond to comments of the ACHP FTA shall notify the signatories as to the course of action it will pursue	
				PA63c—Termination of PA by the execution of a subsequent agreement that explicitly terminates or supersedes the terms	
PA64	Native Hawaiian Organizations (NHO)—If, at any time during implementation of the provisions of this PA, an NHO informs the City or FTA that it attaches religious and cultural significance to properties within the APE, FTA shall invite that NHO to participate in reviews and consultation carried out under the terms of this PA.	GEC Architectural Historian	As needed during design and construction	PA64a—If NHO informs the City or FTA that it attaches religious and cultural significance to properties within the APE, FTA shall invite that NHO to participate in reviews and consultation carried out under the terms of this PA	Document activities

Note: This is a summary of the mitigation measure commitments described in the Section 106 Programmatic Agreement (PA) and does not represent the complete description of these commitments. This summary should not be used as the sole source of information and should be used along with the PA, Final EIS, ROD or other contract documents.

Appendix C
Mitigation Monitoring Process for Oversight
of Environmental Compliance for
Design-Build Contracts

Honolulu High-Capacity Transit Corridor
Project

November 5, 2010

Prepared for:
City and County of Honolulu

1.0 Introduction

This Appendix to the Mitigation Monitoring Plan (MMP) outlines the processes the General Engineering Consultant's Environmental Compliance Manager (GEC ECM) will follow for project management oversight of environmental compliance on Design-Build (DB) contracts. Oversight will predominantly be conducted through the design quality assurance process and tracking the mitigation commitments in a database, as described in the MMP.

Each DB will be required to prepare an Environmental Compliance Plan (ECP) that addresses relevant environmental regulations and permit conditions, and other environmental compliance requirements specified in contract specifications and reports, including the Final Environmental Impact Statement (Final EIS), Record of Decision (ROD), and Section 106 of the National Historic Preservation Act (NHPA) Programmatic Agreement (PA). For the purposes of discussion of environmental commitments in this process, the PA stipulations are incorporated into the ROD and specifically discussed in Section 6.0 of the MMP.

The ECP includes processes for environmental compliance review and reporting to check that the mitigation commitments are included in the design plans and then constructed. The GEC ECM is responsible for verifying that the design submittals meet the contract requirements, which include mitigation commitments in the Final EIS and ROD.

The ECP will be updated as necessary such as when new or modified mitigation or environmental compliance strategies are developed during the term of the contract. There are special provisions for the ECP in contract documents for each DB contract package. In addition, each DB contractor is required to prepare a Design Quality Management Plan (DQMP), and Construction Quality Management Plan (CQMP). The environmental mitigation monitoring will be verified by the GEC through surveillances and audits as described in these plans.

During construction, the GEC ECM will verify that construction of the Project is completed in accordance with the final design plans, permit conditions, and Final EIS and ROD mitigation commitments.

The GEC ECM will document the status and completion of the mitigation commitments as described in the MMP.

2.0 Procedures for GEC Verification of Mitigation Commitments during in Design

The GEC ECM will review and accept the DB Contractor's ECP as discussed above and as required in the contract documents. The ECP will include the DB Contractor's process and procedures for design and construction of the Project in accordance with the mitigation commitments in the Final EIS and ROD. The ECP will include a list of applicable mitigation commitments (labeled by the Project MMP mitigation ID number) and environmental constraint maps.

The GEC Design Manager (DM) and GEC ECM will review design plans in accordance with the *HHCTCP Policies and Procedures Submittal Processing* document No. 6.CM-01 (issued May 7, 2010).

The environmental compliance review process will include, but not be limited to, the following steps:

1. Develop a checklist— The GEC ECM will prepare design checklists that summarize the mitigation commitments in the Final EIS and ROD to support GEC design review for contract compliance.
2. Refine the checklist—The GEC ECM will refine the checklist, as needed, to reflect design refinements, compliance with permit conditions, and design considerations. The need to refine the checklist may be required as conditions warrant to account for local geographic conditions or constraints in design or construction.
3. Verify design submittals—GEC will verify that the DB Contractor has included completed environmental compliance review forms with each submittal. The DB Contractor will document the incorporation of mitigation commitments in design. The GEC ECM will document interim completion in the tracking database as described in the MMP. Documentation will note either the plan sheet or the page of the Basis of Design, which incorporates the mitigation commitment. Documentation will also include, location in the submittal (e.g., plan sheet, page number, stationing).

3.0 Procedures for GEC Verification of Mitigation Commitments during Construction

1. Inspections - During construction, each contractor will perform daily inspections and monitoring of work activities to confirm compliance with environmental requirements. The GEC will be responsible for verifying daily field inspections of construction activities. The GEC ECM will confirm that work areas remain in compliance with all applicable permit conditions, project commitments, contractual obligations, and applicable Federal, State, and Local laws and regulations. The GEC ECM will have the authority to notify the contractor's ECM if environmental noncompliance is observed as part of the agreed upon communication protocol for environmental matters as specified in the contract documents and Contractor's ECP.
2. Field Monitoring -The DB Contractor is responsible for environmental field monitoring in accordance with the process in their ECP. A point of contact will be identified in the ECP. The DB Contractor will complete field inspection reports and enter them into the CMS. The DB Contractor will notify the GEC ECM if there are concerns following procedures for reporting and communication protocol established in the ECP and address the concerns appropriately and in a time sensitive manner. The GEC ECM will assist the DB Contractor in inspecting environmentally sensitive work sites. The GEC ECM will document whether mitigation commitments are being implemented during construction in the CMS environmental database.

Field inspection frequency will vary depending on the type of construction occurring, including the possible impact on the environment and the specificity of the mitigation measure to be implemented. Some areas may be more environmentally sensitive, such as streams or wetlands, and work near those areas will be more frequently inspected.

The DB Contractor will provide bi-weekly environmental status and compliance reports and conduct meetings as part of the ECP for construction. The GEC ECM will review these reports to verify construction monitoring reports, non-compliance concerns and incidents are addressed. The GEC ECM will verify that the DB Contractor's process is implemented.

3. Corrective Action Logs/Environmental Analyses - The DB Contractor will also prepare corrective action logs, job environmental analyses (as presented in both the Contractor's ECP and the contractor's CQMP), and compliance inspections performed by the contractor.

Environmental compliance field inspections will be conducted by the DB Contractor as described in the Contractor's ECP. The GEC ECM will conduct on-site field visits as needed.

The DB Contractor will provide the GEC ECM with a summary of field compliance inspections, issues, and corrective actions for the GEC ECM to submit with their regular report for Federal Transit Administration (FTA).

4.0 Procedure for GEC Surveillance and Audits

The GEC ECM will conduct quality surveillances and audits throughout the project duration, as needed, to verify that the Contractor and Subcontractors are following their established ECP. Surveillance inspections and observation reporting will be conducted and reviewed in accordance with the Project's GEC Quality Plan, Chapter 14, Quality Audits.

The GEC ECM, or designee, will check the environmental compliance reviews performed by the DB Contractor through surveillances and audits. The DB Contractor is responsible for review and implementation of the processes outlined in their ECP. The DB Contractor will perform their environmental compliance review for each design submittal. The GEC ECM will verify the DB Contractor's process includes reviewing design submittals and construction activities against the environmental commitments in the Final EIS and ROD.